



THE NINETIETH  
**ANNUAL REPORT**  
UPON THE  
**HEALTH OF LEICESTER**  
FOR THE YEAR 1938

BY

E. K. MACDONALD, M.D., B.S., D.P.H.


MEDICAL OFFICER OF HEALTH.

**APPENDICES**

- I. REPORT of the TUBERCULOSIS OFFICER.
- II. REPORT on the ISOLATION HOSPITAL AND SANATORIUM.
- III. REPORT on the CITY GENERAL HOSPITAL.
- IV. REPORT of the MATERNITY and CHILD WELFARE MEDICAL OFFICER.
- V. REPORT of the CITY ANALYST.
- VI. REPORT of the CHIEF SANITARY INSPECTOR.
- VII. REPORT of the VENEREAL DISEASES MEDICAL OFFICER.
- VIII. FINANCIAL TABLES.

LEICESTER :

THE BLACKFRIARS PRESS LTD., SMITH-DORRIEN ROAD.



Digitized by the Internet Archive  
in 2017 with funding from  
Wellcome Library

<https://archive.org/details/b29725239>

# CITY OF LEICESTER

---

## HEALTH COMMITTEE

---

### Chairman.

ALD. G. PARBURY.

### Vice-Chairman.

DR. ASTLEY CLARKE, D.L., J.P.

THE LORD MAYOR.  
MR. ADAMS, J.P.  
" CAVE.  
" COOPER.  
" CORT.  
MISS FORTEY, J.P., B.Sc.  
" FRISBY, J.P.

ALD. HAND, J.P.  
MR. HARRIS.  
" HARRISON, J.P.  
" JACKSON.  
" PENTNEY.  
" RICHARDS.  
" RUSSELL.

MRS. SIMPSON, J.P.  
MR. F. S. SMITH.  
" SUTTON.  
MRS. SWAINSTON.  
" WARNER, J.P.  
ALD. WILFORD, J.P.

The Committee meets on the 2nd and 4th Friday in each month in the Committee Room, Town Hall, at 3.30 p.m.

The Health Committee, together with the following co-opted members, not being members of the City Council, constitute the Statutory Maternity and Child Welfare Committee :—Mrs. Banton, Mrs. Taylor, Miss E. J. Windley, B.A.

### Accounts Sub-Committee.

MR. HARRIS.  
" RICHARDS.

MR. RUSSELL.  
MRS. SWAINSTON.

### Health Inspection Sub-Committee.

MR. CORT (Chairman).  
" ADAMS.  
" CAVE.  
DR. ASTLEY CLARKE.  
MR. COOPER.  
MISS FORTEY.

MISS FRISBY.  
MR. HARRIS.  
ALD. PARBURY.  
MR. SUTTON.  
MRS. WARNER.

### Isolation Hospital and Dispensary and Venereal Diseases Sub-Committee.

MR. HARRISON (Chairman).  
DR. ASTLEY CLARKE.  
MR. COOPER.  
" CORT.  
MISS FORTEY.  
MR. JACKSON.

ALD. PARBURY.  
MR. RICHARDS.  
" RUSSELL.  
" SUTTON.  
MRS. SWAINSTON.  
ALD. WILFORD.

### ISOLATION HOSPITAL SUB-COMMITTEES.

#### Grounds.

MR. COOPER (Chairman).  
DR. ASTLEY CLARKE.  
MR. CORT.  
" HARRISON.

ALD. PARBURY.  
MR. RICHARDS.  
" SUTTON.

#### Purchasing.

DR. ASTLEY CLARKE.  
MISS FORTEY.  
MR. HARRISON.

ALD. PARBURY.  
MR. RICHARDS.

#### " Home Place" Management.

ALD. WILFORD (Chairman).  
DR. ASTLEY CLARKE.  
MR. CORT.

ALD. PARBURY.  
MRS. SWAINSTON.

#### Assessments.

DR. ASTLEY CLARKE.  
MR. COOPER.  
" CORT.

MR. HARRISON.  
ALD. PARBURY.  
MR. SUTTON.

### **Maternity and Child Welfare Sub-Committee.**

MISS FORTEY (Chairman).	MR. SMITH.
MR. CAVE.	MRS. SIMPSON.
DR. ASTLEY CLARKE.	„ BANTON.
MISS FRISBY.	„ TAYLOR.
ALD. PARBURY.	MISS WINDLEY.
MR. PENTNEY.	

#### **Necessitous Maternity Cases.**

MRS. SIMPSON.	MISS WINDLEY.
---------------	---------------

### **Maternity Home and Day Nursery Management Sub-Committee.**

ALD. HAND (Chairman).	MR. PENTNEY.
DR. ASTLEY CLARKE.	MRS. SIMPSON.
MISS FORTEY.	„ BANTON.
„ FRISBY.	„ TAYLOR.
ALD. PARBURY.	MISS WINDLEY.

### **General Purposes Sub-Committee.**

ALD. PARBURY (Chairman).	MR. HARRISON.
DR. ASTLEY CLARKE.	„ RICHARDS.
MR. CORT.	MRS. SWAINSTON.
MISS FORTEY.	ALD. WILFORD.
ALD. HAND.	

### **City General Hospital Sub-Committee.**

DR. ASTLEY CLARKE (Chairman).	MR. JACKSON.
MR. COOPER.	ALD. PARBURY.
„ CORT.	MR. RICHARDS.
MISS FORTEY.	MRS. SIMPSON.
„ FRISBY.	„ SWAINSTON.
MR. HARRISON.	„ WARNER.

### **CITY GENERAL HOSPITAL SUB-COMMITTEES.**

#### **Assessments.**

DR. ASTLEY CLARKE.	ALD. PARBURY.
MR. COOPER.	MR. SUTTON.
„ CORT.	

#### **Contracts and Purchasing.**

DR. ASTLEY CLARKE.	ALD. PARBURY.
MISS FORTEY.	MR. RICHARDS.
„ FRISBY.	MRS. SIMPSON.
MR. HARRISON.	„ WARNER.

#### **Farms, Grounds and Buildings.**

MR. RICHARDS (Chairman).	MR. CORT.
DR. ASTLEY CLARKE.	ALD. PARBURY.
MR. COOPER.	

### **Slum Clearance and Property Inspection Sub-Committee**

ALD. PARBURY (Chairman).	MR. HARRISON.
MR. ADAMS.	„ JACKSON.
DR. ASTLEY CLARKE.	„ RICHARDS.
MR. COOPER.	„ SUTTON.
„ CORT.	MRS. WARNER.
MISS FORTEY.	

### **Office Accommodation Sub-Committee**

ALD. PARBURY (Chairman).	ALD. HAND.
MR. CAVE.	MR. HARRIS.
DR. ASTLEY CLARKE.	„ HARRISON.
MR. COOPER.	„ RUSSELL.
„ CORT.	„ SUTTON.
MISS FORTEY.	ALD. WILFORD.
„ FRISBY.	



# Staff of the Health Department

(As constituted January, 1939.)

## Medical Officer of Health.

E. K. MACDONALD, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H.

## Deputy Medical Officer of Health and Tuberculosis Officer.

WYVILLE S. THOMSON, M.D., D.P.H.

## Secretary.

WILFRID CARR, F.C.C.S.

## Medical Officers in Charge of Departments.

Medical Superintendent, City General Hospital .. E. C. HADLEY, M.D., F.R.C.S.E.  
Medical Superintendent, City Isolation Hospital .. J. C. H. MACKENZIE, M.D., D.P.H.  
Medical Officer for Maternity and Child Welfare .. E. B. B. HUMPHREYS, M.B., Ch.B.  
Pathologist .. .. . E. M. WARD, M.B., B.S.

## Assistant Medical Officer.

Assistant Tuberculosis Officer .. .. . E. G. LAWRIE, M.B., Ch.B.

## Assistant Medical Officers (and Assistant School Medical Officers.)

K. McALPINE, M.B., Ch.B. JANET M. DONE, M.D., D.P.H.  
J. H. STRITCH, M.D., D.P.H. PAULINE K. HEARTH, M.B., B.Ch.,  
GLADYS RANDALL, M.B., B.S., D.P.H. B.A.O., D.P.H.  
MARGARET D. HIRD, M.B., Ch.B., D.P.H. C. A. McPHERSON, M.B., Ch.B., D.P.H.

## City General Hospital.

Deputy Medical Superintendent, A. P. M. PAGE, M.D., M.R.C.P.

Four Resident Medical Officers.

## City Isolation Hospital and Sanatorium.

G. O. A. BRIGGS, M.A., M.B., B.Ch., M.R.C.S., L.R.C.P., D.P.H.

Two Resident Medical Officers.

## Consultant Medical Officers (all Departments).

Physicians .. .. . { J. V. C. BRAITHWAITE, M.D., F.R.C.P.  
R.M. CAIRNS, M.D., Ch.B.  
Cardiologist .. .. . J. P. W. JAMIE, M.A., M.D., B.Ch.  
Gynaecologist .. .. . T. C. CLARE, M.D., F.R.C.S., M.C.O.G.  
Surgeon .. .. . E. R. FRIZELLE, M.D., F.R.C.S.  
Orthopaedic Surgeon .. .. . L. MORRIS, M.D., F.R.C.S.  
Ear, Nose and Throat Surgeon .. .. . N. E. KENDALL, F.R.C.S.  
Ophthalmic Surgeon .. .. . A. L. McCURRY, M.D., B.Ch.  
Obstetric Surgeon (to Westcotes) .. .. . T. W. ALLEN, B.A., M.B., D.C.O.G.  
Radiologist .. .. . D. F. LAWSON, M.A., M.B., B.Ch., D.M.R.E.  
Dermatologist .. .. . F. A. E. SILCOCK, M.D., D.P.H.  
Dental Surgeon .. .. . J. ROWLETT, L.D.S.  
Anaesthetists .. .. . { D. JUSTIN DAVIES, M.B., D.A.  
(MRS.) P. MASON, M.R.C.S., L.R.C.P.  
C. H. WILKIE, M.B., B.Sc., Director.  
Venereologists .. .. . { H. N. C. ATKINSON, M.R.C.S., L.R.C.P.  
(Miss) DOROTHY WATERSON, M.B.,  
Ch.B., D.P.H.  
(Mrs.) M. NEWTON-DAVIS, M.B., B.S.  
Public Vaccinators .. .. . { A. J. L. SPEECHLEY, M.R.C.S., L.R.C.P.  
J. W. FORDHAM, M.R.C.S., L.R.C.P.  
No. 1. A. MORRICK, M.B., Ch.B.  
2. A. J. L. SPEECHLEY, M.R.C.S.  
L.R.C.P.  
District Medical Officers .. .. . { 3. J. H. NOBLE, M.D., M.R.C.P.  
4. F. G. MACNAUGHTON, M.D.  
5. P. J. J. HUGHES, M.B., B.Ch.  
6. I. PLATT, M.B., Ch.B.  
7. G. SMITH, M.D., Ch.B.  
Asst. Medical Officer to Swain St. Institution.. J. A. CHAPEL, M.D., Ch.B.

## Matrons.

City General Hospital .. .. . Miss N. N. CLAYE, S.R.N., S.C.M., D.N.  
City Isolation Hospital .. .. . „ B. NESBITT, S.R.N.  
Westcotes Maternity Home .. .. . „ E. BRADSHAW, S.R.N., S.C.M.  
Day Nursery .. .. . „ F. BERKSON, S.R.N., S.C.M.  
"Home Place," Holt .. .. . „ R. E. FRY.

## Engineer to Health Department.

R. H. LETCHFORD.

### Public Analyst's Laboratory.

<i>Public Analyst</i>	..	..	..	..	..	F. C. BULLOCK, B.Sc., F.I.C.
<i>Assistants</i>	..	..	..	..	..	{ J. L. PINDER, B.Sc., A.I.C. J. SMART. P. G. WRIGHT.

### Sanitary Inspectors.

<i>Chief Inspector</i>	..	..	..	..	..	F. G. McHUGH, 1 3 4 5
<i>Deputy Chief Inspector</i>	..	..	..	..	..	A. T. PRICE, 1 3

#### *Inspectors—*

R. T. BLAYLOCK, 1 3 4 7	F. W. MURRAY, 7 8
T. W. BERESFORD, 2 3	W. MUSTON, 1 3
F. BURKE, 2 3	J. W. NORTH, 1 3
H. BURLEY, 2 3	E. OWEN, 2 3 14
H. CLOUGH, 1 3	W. J. PARKINSON, 1 3 6
M. C. CRIPPS, 1 3	G. V. PENN, 2 3
H. ELKINGTON, 3 5	A. SMITH, 2 3 4 14
R. V. FIDDES, 1 3	E. THOMPSON, 1 3
G. H. FYFE, 2 3	A. G. WATKIN, 2 3 16
W. J. GETGOOD, 1 3 4	G. H. WATMOUGH, 1 3
T. HINES, 1 3	A. WELTON, 1 3
W. C. LONG, 1 3	J. WRIGHT, 2 3
G. H. MAWHINNEY, 2 3 4 15	J. YATES, 1 3
A. McCARTNEY, 2 14	

### Health Visitors.

<i>Superintendent..</i>	..	..	..	..	..	MRS. REED, 9 10
-------------------------	----	----	----	----	----	-----------------

#### *District Health Visitors—*

Miss M. ASH, 9 11 12 13	Miss F. KEYNES, 9 11 12 13
„ R. M. BEACOCK, 9 10 11 13	„ B. M. LANGTON, 9 11 12 13
„ C. M. CASSON, 9 10 11 13	„ M. D. LLOYD, 9 10 11 13
„ L. CHAMBERS, 9 11 13	„ D. L. MALLISON, 9 11 12 13
„ M. CONLON, 9 11 12 13	„ J. G. MASTERS, 9 10
„ E. M. CRAGG, 9 10 11 13	„ E. MYCOCK, 9 10 11 13
„ H. M. DENSHAM, 9 11 12 13	„ H. E. RICH, 9 11 12 13
„ H. DOLAN, 9 10 11 13	„ M. R. WHITE, 9 11 12 13
„ G. M. HARRINGTON, 9 11 12 13	„ E. WILFORD, 9 11 13
„ H. HIRD, 9 12	„ E. L. WOLLASTON, 9 11 13
„ A. KAVANAGH, 9 11 12 13	„ M. E. WOOLCOCK, 9 11 12 13

<i>Manageress of Milk Depot</i>	..	..	..	..	..	MRS. E. STANION, 10
---------------------------------	----	----	----	----	----	---------------------

<i>Tuberculosis Nurses</i>	..	..	..	..	{	Miss F. BEASLEY, 9 11 13 „ E. MOUND, 9 11 13 „ C. NEILL, 11
----------------------------	----	----	----	----	---	---

1. Holds Sanitary Inspector's Certif. Roy. San. Inst.
2. Holds Royal Sanitary Institute and Sanitary Inspectors Exam. Joint Board Certificate.
3. Holds Meat and Food Inspector's Certif. Roy. San. Inst.
4. Holds Certif. of Roy. San. Inst. for San. Science as applied to Buildings and Public Works,
5. Holds Sanitary Inspector's Certif. under Public Health (London) Act, 1891.
6. Holds Sanitary Inspector's Certif. San. Inspector's Assocn.
7. Holds Certif. of Royal San. Assocn. of Scotland for Meat Inspection.
8. Holds Certif. of Royal San. Assocn. of Scotland for Sanitary Science.
9. Holds Certif. of the Central Midwives' Board.
10. Holds Health Visitors' Certif. of the Roy. San. Inst.
11. Holds Certif. as fully Trained Nurse.
12. Holds Health Visitors' Certificate.
13. Holds State Registered Nursing Certificate.
14. Holds Liverpool University Certificate of Competency as Meat and Food Inspector.
15. Holds Diploma of Royal Institute of Public Health and Hygiene.
16. Holds Smoke Inspectors' Certificate, R.S.I.

## Municipal Midwives.

### Area No 1. Saffron Lane.

MRS. COPSON, S.C.M., 511, Saffron Lane	..	..	..	..	..	Tel No. 32374
MRS. DODSON, S.C.M., 2, Burnaston Road	..	..	..	..	..	„ 32172
MISS GREEN, S.C.M., 2, Burnaston Road	..	..	..	..	..	„ 32172
MRS. KINGHAM, S.C.M., 8, Uplands Road	..	..	..	..	..	„ 32473

### Area No. 2. Braunstone.

MISS HOPKINS, S.C.M., 17, Imperial Avenue	..	..	..	..	..	„ 34398
MISS KNOTT, S.C.M., S.R.N., 53, Erdyngton Road	..	..	..	..	..	„ 88114
MRS. RITCHIE, S.C.M., 291, Gooding Avenue	..	..	..	..	..	„ 88598

### Area No. 3. Western.

MISS CONWAY S.C.M., S.R.N., 42, Glenfield Road	..	..	..	..	..	„ 65476
MISS McCAULL, S.C.M., 13, Braunstone Avenue	..	..	..	..	..	„ 22323

### Area No. 4. Central.

MISS ELLIOTT, S.C.M., S.R.N., 47, Princess Road	..	..	..	..	..	„ 65475
MRS. LEDGER, S.C.M., 205, Birstall Street	..	..	..	..	..	„ 20502
MISS MANSFIELD, S.C.M., 26, Windermere Street	..	..	..	..	..	„ 22151
MISS E. SMITH, S.C.M., 61, Central Road	..	..	..	..	..	„ 58531

### Area No. 5. Northern.

MRS. CLARKE, S.C.M., 186, Canon Street Extension	..	..	..	..	..	„ 61483
MRS. FEARN, S.C.M., 13, Perseverance Road, Birstall	..	..	..	..	..	„ 85354
MRS. HOWARD, S.C.M., 52, Kerrysdale Avenue	..	..	..	..	..	„ 61646
MRS. PAYNE, S.C.M., S.R.N., 7, Gipsy Road	..	..	..	..	..	„ 61653

### Area No. 6. Humberstone.

MRS. RIMMINGTON, S.C.M., 18, Mallory Place	..	..	..	..	..	„ 27509
--	----	----	----	----	----	---------

### Area No. 7. Spinney Hill.

MRS. HURD, S.C.M., S.R.N., 34, Diseworth Street	..	..	..	..	..	„ 65481
MRS. E. E. SMITH, S.C.M., 12, Dashwood Road	..	..	..	..	..	„ 24979

### Area No. 8. Stoneygate and Evington

MISS HARDING, S.C.M., 224, Welford Road	..	..	..	..	..	„ 78124
---	----	----	----	----	----	---------

## Clerical Staff.

Chief Clerk, Sanitary Office .. .. T. P. POYNOR.

### General Clerks—

F. KELLETT.	MISS D. R. POTTERTON.	MISS K. W. TUCKER
E. SLINGSBY.	„ E. WHITWELL.	„ E. E. BATTLE.
G. H. SEAL.	„ V. DAWN.	„ G. HADDON.
R. FIELDMAN.	„ V. NETHERCOT	„ D. I. MITCHELL
D. BOUGHTON	„ I. M. GREEN	„ D. SMITH.

Tuberculosis Dispensary .. .. { Miss J. HEATON.  
„ B. M. BOND.

### Isolation Hospital and Sanatorium—

Steward .. ..	H. I. REES.
Clerks .. ..	{ A. K. GOODMAN. T. F. M. GOWAN. Miss V. ALLSOP. „ J. MIDDLETON.

### City General Hospital—

Steward .. ..	E. H. BALL.
Asst. Steward .. ..	S. WHATSIZE.
Clerks .. ..	{ L. HEATHERLEY. Miss E. M. BRADSWORTH. „ M. L. READ. „ P. B. HIGGINS. „ J. GUILLAIN. „ M. WENLOCK.

Milk Depot .. .. { Mrs. BREWIN.  
Miss A. JESSON.

Vaccination Officer .. .. J. H. LOCKWOOD



# CONTENTS.

	PAGE
Members of Health Committee and Sub-Committees .. .. .	iii.
Staff of Health Department .. .. .	v.
Summary of Statistics .. .. .	ix.
List of Financial Tables, Statistical Tables and Graphs .. .. .	x.
Covering Letter .. .. .	xi.

## SECTION A. Statistical and Social Conditions.

Population, Births .. .. .	3
Infant Mortality, Still-births, Illegitimacy, Marriages and Deaths..	8
Causes of Deaths .. .. .	9
Measles, Scarlet Fever, Whooping Cough .. .. .	19
Typhoid Fever, Diphtheria, Immunisation against Diphtheria ..	20
Influenza, Pneumonia, Bronchitis, Cancer .. .. .	24
Tuberculosis .. .. .	27
Maternal Mortality, Deaths from Violence .. .. .	28

## SECTION B. General Provision of Health Services.

Laboratory Facilities, Ambulance Services, Nursing in the Home..	31
Clinics and Treatment Centres, New Health Centre .. .. .	31
Voluntary Hospitals :	
Royal Infirmary .. .. .	32
Faire Hospital .. .. .	33
Fielding Johnson Hospital, Highfields Hospital .. .. .	34
Leicester and Leicestershire Maternity Hospital .. .. .	34
Public Institutions :	
City Mental Hospital, Leicester Frith Institution .. .. .	34
Saturday Hospital Society, Public Abattoir, Meteorology, Cremation	35
Air Raid Precautions .. .. .	36

## SECTION C. Sanitary Circumstances.

Water, Drainage and Sewerage .. .. .	43
Sewage Disposal, Rivers and Watercourses .. .. .	44
Public Cleansing, School Medical Service .. .. .	45

## SECTION D. Housing.

New Houses .. .. .	49
Slum Clearance .. .. .	49
Rehousing, Overcrowding .. .. .	50
Abatement of Overcrowding .. .. .	52

## SECTION E. Inspection and Supervision of Food.

See Reports of the Public Analyst and the Chief Sanitary Inspector  
on pages 193 and 227.

## APPENDICES.

I.—REPORT OF THE TUBERCULOSIS OFFICER .. .. .	57
II.—REPORT ON THE ISOLATION HOSPITAL AND SANATORIUM .. .. .	81
III.—REPORT ON THE CITY GENERAL HOSPITAL .. .. .	109
IV.—REPORT OF THE MATERNITY AND CHILD WELFARE OFFICER .. .. .	147
V.—REPORT OF THE CITY ANALYST .. .. .	193
VI.—REPORT OF THE CHIEF SANITARY INSPECTOR .. .. .	227
VII.—REPORT ON THE VENEREAL DISEASE CLINICS .. .. .	255
VIII.—FINANCIAL TABLES .. .. .	265
INDEX .. .. .	273



# SUMMARY OF STATISTICS

FOR THE YEAR 1938.

## CITY OF LEICESTER.

Population at Census, 1931 .. .. .	239,169
„ (estimated) at Mid-year 1938 .. .. .	263,300
Marriages .. .. .	2,240
Births (corrected) .. .. .	3,873
Birth-rate .. .. .	14.71
Deaths (corrected for transferable deaths) .. .. .	2,951
Death-rate .. .. .	11.21
(Standardised death-rate=11.43)	
Deaths under One Year .. .. .	178
Infant Mortality (per 1,000 Births) .. .. .	45.95
Maternal Mortality (per 1,000 total births) .. .. .	2.5
Zymotic-rate (per 1,000 population) .. .. .	0.36
Respiratory-rate „ „ .. .. .	0.94
Cancer-rate „ „ .. .. .	1.64
Tuberculosis-rate „ „ .. .. .	0.752
Phthisis-rate „ „ .. .. .	0.665
Correction Factor (R.G ) .. .. .	1.02

Area of City (in acres) as extended April, 1935 .. .. .	16,979
Number of persons per acre at Census, 1931 .. .. .	27.9
Number of persons per “structurally separate dwelling” at Census, 1931 .. .. .	3.80
Number of Inhabited Tenements, January, 1939 .. .. .	78,095
Number of Empty Houses, January, 1939 .. .. .	1,032
Number of Empty Cottages, January, 1939 .. .. .	894
Rateable value (1938-1939) .. .. .	£2,008,188
General Rate for the year, 1938-1939 .. .. .	14s. 2d. in the £
Produce of 1d. Rate (for 1937-1938) net .. .. .	£7,741

	England & Wales	126 County Boro's and Great Towns including London	London Adminis- trative County
Birth-rate .. .. .	15.1	15.0	13.4
Death-rate .. .. .	11.6	11.7	11.4
Infant Mortality (per 1,000 Births) .. .. .	53.0	57.0	57.0

(Registrar General's Figures.)

## APPENDIX VIII.

### List of Financial Tables

TABLE	PAGE
City General Hospital .. .. .	267
Isolation Hospital and Sanatorium .. .. .	268
Home Place Sanatorium, Holt .. .. .	269
Municipal Maternity Home .. .. .	270
Day Nursery .. .. .	271
Milk Depot .. .. .	272

### List of Statistical Tables appearing in the Report

1.—Vital Statistics—1920 to 1938 (Ministry of Health Table) ..	4
2.—Population and Vital Statistics, 1900-1938 .. ..	5
3.—Vital Statistics of 15 Large Towns and Leicester, 1938 ..	6
4.—Municipal Wards ; Population, Births, Deaths, &c., 1938 ..	10
5.—Municipal Wards ; Vital Statistics, 1938 .. ..	11
6.—Municipal Wards ; Deaths, 1938, classified for Age and Cause ..	12
7.—Deaths from Zymotic Diseases, 1925-1938 .. ..	13
8.—All Deaths, 1938, classified according to Disease and Age Period ..	14
9.—Vaccination Return .. .. .	16
10.—Vaccinations performed in 1938 .. .. .	18
11.—Measles and Whooping Cough Deaths and Mortality per 1,000 births	19
12.—Deaths from Cancer, 1938 ; Tabulated as to age, sex and organ affected .. .. .	25
13.—Cancer Statistics, 1904-1938 .. .. .	26
14.—Housing Conditions for the year 1938 .. .. .	53
15.—Deaths from Tubercular Diseases, 1904-1938 .. ..	64
16.—Deaths from Phthisis, 1938 ; Age and Sex Distribution .. ..	65
17.—Notifications of Principal Notifiable Diseases, 1925-1938 ..	108
18.—Municipal Maternity Home ; Statistics, 1938 .. ..	181
19.—List of Registered Nursing Homes .. .. .	184
20.—Infant Mortality from stated causes at various ages, 1938 ..	188
21.—Venereal Disease Statistics, 1922-1938 .. .. .	264

### Graphs

	FACING PAGE
I.—INFANT MORTALITY .. .. .	8
II.—PROPORTION OF DEATHS FROM PRINCIPAL CAUSES .. ..	9
III.—TUBERCULOSIS MORTALITY .. .. .	27
IV.—CONTROL OF PASTEURISED MILK BY PHOSPHATASE TEST ..	198
V.—VENEREAL DISEASES .. .. .	257

*To the Chairman and Members of the Health Committee.*

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to submit herewith the Annual Report on the Health of the City of Leicester for the year 1938.

**Statistics.**

On the whole, the statistical returns show a satisfactory state of affairs. The birth rate is again slightly higher than in the previous year—it has risen during each of the last four years—and the death rate is the lowest on record. This compares very favourably with other Midland towns, of which Leicester is the best in this respect. The infant mortality rate is easily the lowest on record, achieving a level which would have been unbelievable 20 years ago, and once again the mortality from pulmonary tuberculosis has achieved a new low record.

The Maternal mortality rate, which for 1937 was a low record, was not quite so good in 1938, but the rate was still much below the previous average for the City, and considerably less than the average for County Boroughs.

Self-congratulation on the above should be tempered by a knowledge that years vary and the pendulum swings—a good year is followed often by a lean year and our efforts to make Leicester a health resort should not be relaxed. An industrial town need not, and should not, be a death-trap. The statistics certainly suggest that Leicester is pointing the way to better things.

**A.R.P.**

Work on Air Raid Precautions, commencing like a small cloud on the horizon, grew during the year till it overshadowed and pushed aside practically all but the merest routine work of the department.

This is not the place to comment on this unfortunate state of affairs, but I may perhaps be allowed to express some feeling of resentment at the divorcement from normal work to this necessary but highly unsatisfactory duty.

The late publication of this Report, which is regretted, is solely due to the extra work involved under A.R.P.



## Other Matters.

I do not propose to comment further in this opening letter.

Numerous matters of the greatest importance to the City and its health will be found, if looked for, in the body of the Report and the Appendices. To anyone who is really interested in his fellow citizens and the welfare of his City, a perusal of the following pages will not be a waste of time, but will unfold a romance of modern civilisation which we are inclined to take too much for granted.

The year has been a bad one for the staff of your department as well as for yourselves. Crisis has followed crisis, work has increased almost out of all bounds and yet I can, without hesitation, say that the staff has worked consistently with only one object in view—to do what had to be done and to do it well. The loyalty of everyone has been one of the most inspiring aspects of a difficult time.

To you, Sir, and to the Members of your Committee also, I wish to place on record my gratitude for your help and sympathetic consideration of all problems laid before you.

I am,

Ladies and Gentlemen,

Your obedient Servant,

E. K. MACDONALD, M.D., B.S., D.P.H.,  
*Medical Officer of Health.*

Health Department,  
Grey Friars,  
Leicester.

28th July, 1939.



SECTION A.

---

Statistics and Social  
Conditions



# ANNUAL REPORT, 1938

(The Report takes the form requested by the Ministry of Health in Circular 1728.)

## SECTION A.

### Statistics and Social Conditions of the Area

The City of Leicester lies in the centre of England, in the middle of an agricultural district. The situation of the City is important for many reasons, but probably the most important from the point of view of health is that as there is no large town within many miles and the real countryside is only three or four miles from the centre of the City, no smoke-laden clouds reach us from our neighbours and the atmosphere is proportionately cleaner.

Leicester is a prosperous city, the staple industries, hosiery and boots and shoes, providing a large volume of employment. So that although there is a certain amount of unemployment, it does not reach the unfortunate proportion met with in some parts of England.

#### Comments on Vital Statistics.

##### General Note.

The Registrar-General estimates that the population of the City for mid-year 1938 was 263,300. This shows a small increase of 400 over the population estimated for 1937.

##### Births.

The corrected number of births for the year was 3873 (M. 1942, F. 1931) compared with 3807 for 1937 and 3786 for 1936. The birth rate was 14.71 compared with 14.48 for 1937 and 14.46 for 1936.

TABLE 1.—Vital Statistics of whole District during 1938 and previous years. City of Leicester.

YEAR.	Population estimated to middle of each year, revised in light of 1921 and 1931 Census. (2)	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NET DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number. (3)	Net.		Number. (6)	Rate. (7)	Of Non-residents registered in the District. (8)	Of Residents not registered in the District. (9)	Under 1 Year of Age.		At all Ages.	
			Number. (4)	Rate. (5)					Number. (10)	Rate per 1000 Net Births. (11)	Number. (12)	Rate (13)
(1)												
1920	236,873	5934	5905	24.91	2535	10.69	173	512	528	89.4	2874	12.13
1921	237,900	5074	5097	21.42	2527	10.62	182	532	438	85.9	2877	12.09
1922	238,240	4729	4646	19.50	2675	11.22	181	544	408	87.8	3038	12.71
1923	238,580	4647	4593	19.25	2396	10.04	182	560	386	84.0	2774	11.63
1924	238,920	4466	4380	18.33	2511	10.50	218	638	346	77.4	2931	12.27
1925	239,260	4316	4197	17.54	2709	11.32	212	637	368	87.6	3134	13.10
1926	239,600	4268	4119	17.19	2542	10.60	214	649	319	77.4	2977	12.42
1927	239,940	4124	3965	16.53	2657	11.07	273	660	298	75.1	3044	12.69
1928	240,280	4216	3988	16.60	2395	9.96	268	621	282	70.7	2748	11.44
1929	240,620	4044	3747	15.57	2946	12.24	277	748	301	80.3	3417	14.20
1930	240,960	4171	3872	16.07	2345	9.73	204	603	216	55.7	2744	11.39
1931	241,300	3950	3684	15.28	2673	11.09	342	653	235	63.7	2984	12.38
1932	240,800	3846	3583	14.88	2686	11.15	349	685	251	70.0	3022	12.55
1933	241,500	3532	3242	13.42	2750	11.39	356	689	242	74.65	3082	12.77
1934	241,100	3749	3417	14.17	2478	10.28	335	688	180	52.68	2831	11.74
1935	261,000	4025	3571	13.94	3075	12.07	340	239	212	59.37	2974	11.61
1936	261,800	4322	3786	14.46	3327	12.71	360	63	221	58.37	3030	11.57
1937	262,900	4420	3807	14.48	3651	13.89	445	69	238	62.52	3275	12.46
1938	263,300	4479	3873	14.71	3327	12.64	432	56	178	45.95	2951	11.21

Number of inhabited houses, January, 1939	..	78,095	Area of District in acres (exclusive of
Average number of persons per house, Census, 1931	..	3.79	area covered by water) .. .. .
			16,979

NOTE.—This Table has been filled in, in accordance with the instructions given on the form supplied by the Ministry of Health.



TABLE 2.

**LEICESTER BOROUGH.**

Showing estimated Population, Birth-rates, and Death-rates  
(General and Zymotic) per 1000 living during the last 39 years,  
1900-1938.

Year. (1)	Estimated Population. (2)	Birth Rate. (3)	Death Rate. (4)	Zymotic (Death) Rate. (5)	Infant Mortality. (6)
1900	208,600	29.7	17.8	3.6	174.1
1901	212,498	29.0	15.7	2.3	178.0
1902	213,974	29.5	14.8	1.5	153.3
1903	215,461	27.9	14.2	1.4	161.3
1904	216,958	27.5	15.0	2.0	161.1
1905	218,464	26.9	14.0	1.6	146.5
1906	219,980	26.6	15.1	2.4	166.2
1907	221,508	24.9	13.4	.9	130.1
1908	223,046	25.4	13.9	1.6	129.7
1909	224,595	24.1	14.0	1.3	126.6
1910	226,154	23.7	12.4	.7	126.3
1911	227,634	22.9	13.4	1.4	130.0
1912	229,294	22.5	13.5	.9	109.0
1913	230,970	22.8	13.3	.7	119.3
1914	232,664	22.1	14.1	1.1	119.9
1915	232,664	20.8	14.9	.5	122.8
1916	225,907	20.7	13.6	.8	104.8
1917	217,537	16.9	13.5	.7	105.0
1918	217,537	14.9	17.8	.5	108.1
1919	236,059	15.3	13.0	.3	98.0
1920	236,874	24.9	12.1	.8	89.4
1921	237,900	21.4	12.0	.5	85.9
1922	238,240	19.5	12.7	.5	87.8
1923	238,580	19.2	11.6	.4	84.0
1924	238,920	18.3	12.3	.7	79.0
1925	239,260	17.5	13.1	1.3	87.6
1926	239,600	17.2	12.4	.7	77.4
1927	239,940	16.5	12.7	.5	75.1
1928	240,280	16.6	11.4	.2	70.7
1929	240,620	15.6	14.2	1.3	80.3
1930	240,960	16.1	11.4	.4	55.7
1931	241,300	15.3	12.4	.5	63.7
1932	240,800	14.9	12.5	.8	70.0
1933	241,500	13.4	12.8	1.0	74.6
1934	241,100	14.2	11.7	.4	52.7
1935	261,000	13.9	11.6	.4	59.4
1936	261,800	14.5	11.6	.3	58.4
1937	262,900	14.5	12.5	.8	62.5
1938	263,300	14.7	11.2	.4	45.95

The above figures have been revised in the light of the census figures of the different census years. The population for the year 1920 having been considerably over-estimated has necessitated important corrections in that year.

TABLE

Showing the Population, Birth-rates, Death-rates, Zymotic Death-rates

NAME OF TOWN	Population as estimated by the Registrar General Mid-1938	Compara- bility Factor	Per 1,000 Population		Death Rate as adjusted by Factor	DEATH RATES		
			Birth Rate	Crude Death Rate		Small- pox	Measles	Scarlet Fever
1. BIRMINGHAM ..	1,041,000	1.10	16.6	10.88	11.99	—	0.01	0.001
2. BRADFORD ..	288,700	1.00	13.51	13.78	13.78	—	0.05	0.001
3. BRISTOL ..	415,500	0.98	14.58	11.71	11.4	—	0.06	0.000
4. CARDIFF ..	223,110	1.06	15.79	11.97	12.68	—	—	0.000
5. COVENTRY ..	213,000	1.21	17.0	9.8	11.8	—	0.009	0.000
6. HULL .. ..	318,700	1.10	18.1	12.2	13.4	—	0.09	0.001
7. LEEDS .. ..	494,000	1.07	15.4	12.7	13.5	—	0.04	0.002
8. LEICESTER ..	263,300	1.02	14.71	11.21	11.43	—	0.004	—
9. LIVERPOOL ..	827,400	1.15	18.7	12.3	14.1	—	0.13	0.001
10. MANCHESTER ..	747,318	1.14	14.75	12.35	14.08	—	0.07	0.001
11. NEWCASTLE ..	291,300	1.13	16.1	12.4	14.0	—	0.07	—
12. NOTTINGHAM	278,300	1.03	15.57	12.72	13.10	—	0.03	0.001
13. PORTSMOUTH ..	258,400	0.99	14.73	12.21	12.09	—	0.04	0.001
14. SHEFFIELD ..	520,000	1.13	15.662	11.358	12.835	—	0.052	0.000
15. STOKE-on-TRENT	272,000	1.22	16.3	11.3	14.2	—	0.033	0.001
16. SUNDERLAND ..	182,400	1.12	19.19	12.75	14.28	0.00	0.04	0.001

Maternal Mortality, etc., in 16 Large Towns for the year 1938.

PER 1,000 POPULATION FROM :—								MATERNAL MORTALITY (per 1,000 Total Births)		
Whooping Cough	Diphtheria	Typhoid and Para- typhoid	Diarrhoea (under 2 years)	Influenza	Tuberculosis		Infantile Mortality Rate	From Sepsis	From Other Causes	Total
					Pulmonary	Other Forms				
0.07	0.07	—	0.21	0.15	0.70	0.08	61	0.61	2.10	2.71
0.04	0.08	—	0.08	0.09	0.53	0.10	58	0.49	3.66	4.15
0.004	0.05	—	0.024	0.102	0.56	0.096	42	0.64	2.54	3.18
0.05	0.03	—	0.05	0.08	0.86	0.13	52	1.35	2.44	3.79
0.014	0.019	0.005	0.080	0.160	0.648	0.094	56	0.828	1.932	2.76
0.08	0.13	0.00	0.17	0.12	0.77	0.12	69	0.33	2.34	2.67
0.03	0.07	—	0.19	0.06	0.68	0.12	64	0.25	1.51	1.76
0.034	0.125	0.004	0.065	0.076	0.665	0.087	45.9	1.25	1.25	2.5
0.12	0.17	0.01	0.14	0.08	0.77	0.12	73	0.65	1.31	1.96
0.02	0.07	—	0.12	0.11	0.83	0.14	68.84	1.39	2.86	4.25
0.01	0.08	—	0.18	0.08	0.85	0.15	66	1.03	2.27	3.30
0.04	0.01	—	1.0	0.07	0.69	0.13	71	0.44	1.33	1.77
0.00	0.06	—	0.19	0.11	0.63	0.11	60.15	0.25	2.03	2.28
0.019	0.056	0.002	0.031	0.085	0.498	0.083	50	1.54	1.31	2.85
0.015	0.118	—	0.078	0.085	0.665	0.132	52	1.81	3.38	5.19
0.03	0.09	0.005	0.28	0.12	0.77	0.10	67	0.82	3.03	3.86



### **Infantile Mortality.** (See Graph I and Table 20.)

The rate for 1938 was 45.9. This is calculated on the number of infants dying before reaching one year of age per 1,000 live infants born. The rate for 1937 was 62.5.

The rate for 1938 is easily the lowest ever recorded in Leicester, the previous best being 52.7 in 1934.

Analysing the incidence and causes of death we find that 105 boy babies died as against 73 girl babies out of practically an equal number of births. This increased sex incidence does not appear to be due to any one cause, for an examination of the individual causes of death indicates a preponderance of male deaths in almost every instance, especially in those due to congenital causes.

### **Stillbirths.**

The number of stillbirths, as given by the Registrar-General, was 133, or 3.3 per cent. of the total births, compared with 129, or 3.4 per cent., in 1937.

### **Illegitimacy.**

The corrected number of illegitimate births, including stillbirths, was 211, equal to 5.3 per cent. of the total births. The figure for 1937 was 5.0.

### **Marriages.**

The number of marriages solemnised in Leicester was :—

	1938	(1937)
Church of England.. ..	1,183	1,231
Elsewhere .. ..	1,057	1,053
	<hr/>	<hr/>
Total .. ..	2,240	2,284

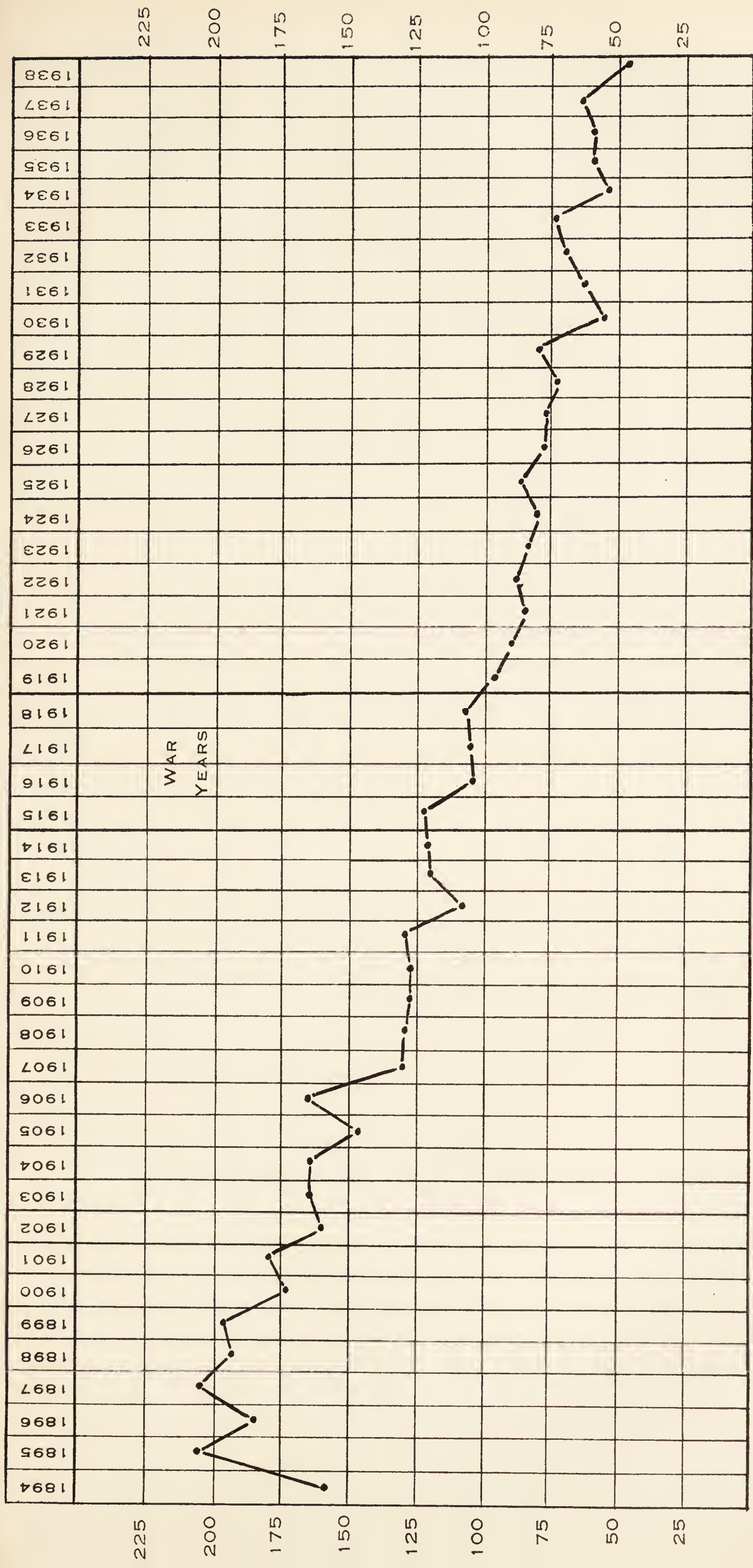
N.B.—These figures do not include the extended City boundaries.

### **Deaths.**

The corrected number of deaths which occurred during 1938 was 2,951, namely 1,526 males and 1,425 females. The death-rate per 1,000 of the estimated population was 11.21 compared with 12.46 in 1937.



# INFANT MORTALITY, ANNUAL RATES IN LEICESTER. 1894-1938



FOR ACTUAL FIGURES SEE TABLE 10







TABLE 4.  
MUNICIPAL WARDS. VITAL STATISTICS, 1938.

WARD. (1)	*No. of Inhabited Houses, Jan., 1939. (2)	Estimated Population, Jan., 1939. (3)	Estimated No. of Persons per "structurally separate Dwelling." (4)	Births (corrected). (5)	Deaths (Corrected). (6)	Deaths under 1 year. (7)
1. St. Margaret's	..	17,261	3.37	367	331	26
2. Latimer ..	..	18,329	3.37	280	217	19
3. Charnwood	..	16,412	3.37	215	202	9
4. Spinney Hill	..	17,221	3.37	200	216	6
5. Wycliffe ..	..	15,084	3.37	207	208	21
6. The Castle	..	17,436	3.37	177	220	5
7. Westcotes ..	..	21,952	3.37	241	252	8
8. Newton ..	..	10,204	3.37	118	127	4
9. Abbey ..	..	14,575	3.37	217	143	5
10. Belgrave ..	..	19,731	3.37	308	189	17
11. Humberstone	..	16,173	3.37	323	134	9
12. Evington ..	..	11,286	3.37	151	94	8
13. Knighton ..	..	17,726	3.37	173	210	6
14. De Montfort	..	17,531	3.37	269	138	14
15. Aylestone ..	..	16,304	3.37	249	148	8
16. North Braunstone	..	15,954	3.37	276	119	13

\* Figures supplied by City Treasurer.

TABLE 5.  
MUNICIPAL WARDS. VITAL STATISTICS, 1938.

WARD.		Birth-rate.	Death-rate.	Infant Mortality.	Zymotic rate.	Phthisis rate.
1.	St. Margaret's	21.3	19.2	71	0.46	1.85
2.	Latimer	15.3	11.8	68	0.27	0.65
3.	Charnwood	13.1	12.3	42	0.24	1.22
4.	Spinney Hill	11.6	12.5	30	0.12	0.41
5.	Wycliffe ..	13.7	13.8	101	0.33	0.66
6.	The Castle	10.2	12.6	28	0.11	0.29
7.	Westcotes	11.0	11.5	33	0.23	0.50
8.	Newton ..	11.6	12.4	34	0.39	0.88
9.	Abbey	14.9	9.1	23	0.69	0.62
10.	Belgrave ..	15.6	9.6	55	0.35	0.51
11.	Humberstone	19.9	8.3	28	0.25	0.56
12.	Evington ..	13.4	8.3	53	0.35	0.27
13.	Knighton	9.8	11.8	35	0.23	0.11
14.	De Montfort	15.3	7.9	52	0.57	0.51
15.	Aylestone	15.3	9.1	32	0.06	0.68
16.	North Braunstone	17.3	7.5	47	0.13	0.75

TABLE 6.  
Deaths in each Ward, classified for Age and Cause, 1938.

WARD. (1)	Under 1 year. (2)	1 to 4 years. (3)	5 to 54 years. (4)	Over 55 years. (5)	Total all ages. (6)	Influenza. (7)	Measles. (8)	Scarlet Fever. (9)	Whooping Cough. (10)	Diphtheria. (11)	Typhoid Fever. (12)	Other Zymotics. (13)	Total (14)	Diarrhoea. (15)	Phthisis. (16)	Respiratory Diseases. (17)	Developmental Diseases. (18)	Cancer. (19)	Total. (20)
1. St. Margaret's ..	26	9	73	223	331	..	1	..	3	4	..	..	8	4	32	26	225	36	331
2. Latimer ..	19	8	45	145	217	..	..	..	1	1	..	3	5	5	12	22	144	29	217
3. Charnwood ..	9	6	60	127	202	1	..	..	..	2	..	1	4	3	20	23	125	27	202
4. Spinney Hill ..	6	4	48	158	216	..	..	..	..	1	..	1	2	..	7	20	151	36	216
5. Wycliffe ..	21	3	38	146	208	1	..	..	2	1	..	1	5	5	10	30	133	25	208
6. Castle ..	5	3	40	172	220	1	..	..	..	1	..	..	2	..	8	22	153	35	220
7. Westcotes ..	8	3	44	197	252	3	..	..	..	1	..	1	5	1	11	12	182	41	252
8. Newton ..	4	3	38	82	127	2	..	..	..	2	..	..	4	2	9	14	85	13	127
9. Abbey ..	5	6	26	106	143	2	..	1	..	6	..	1	10	..	9	9	94	21	143
10. Belgrave ..	17	1	40	131	189	4	..	..	1	2	..	..	7	1	10	17	128	26	189
11. Humberstone ..	9	5	41	79	134	..	..	..	..	4	..	..	4	1	9	10	88	22	134
12. Evington..	8	4	30	52	94	1	..	..	..	3	..	..	4	..	3	6	70	11	94
13. Knighton ..	6	1	36	167	210	2	..	..	..	..	1	1	4	..	2	16	151	37	210
14. De Montfort ..	14	7	53	64	138	1	..	..	2	4	..	3	10	..	9	15	87	17	138
15. Aylestone ..	8	1	44	95	148	..	..	..	..	..	..	1	1	1	11	9	106	20	148
16. North Braunstone ..	13	6	45	55	119	..	..	..	..	1	..	1	2	..	12	8	76	21	119
Infirmary ..	31	17	117	124	289	..	..	..	..	..	..	1	1	4	1	25	211	47	289
City General Hospital ..	53	14	187	300	554	3	..	..	..	..	..	1	4	15	58	62	312	103	554
City Mental Hospital ..	..	..	16	47	63	..	..	..	..	..	..	2	2	..	2	7	46	6	63
Isolation Hospital ..	5	21	58	2	86	..	..	1	8	32	1	9	51	..	27	3	4	1	86

Deaths in Institutions have been subtracted from the Wards in which the Institutions are situated; and (except in some cases in the Workhouse where the home address is unobtainable) have been distributed to the Wards to which they belong. Deaths of persons transferred from the Workhouse to the City General Hospital, however, have not been distributed, as the home addresses of such persons are not obtainable.



TABLE 7.

Showing the number of Deaths from Zymotic (or Germ) Diseases in the Fourteen Years 1925-1938.

DISEASE.	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Smallpox	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Measles	43	8	18	1	17	5	14	10	17	12	9	0	10	1
Scarlet Fever	10	5	3	4	2	2	0	2	1	1	1	0	0	0
Diphtheria	34	37	11	17	13	7	6	5	11	20	8	7	20	33
Whooping Cough	69	21	29	7	56	8	9	16	13	6	16	11	11	9
Enteric Fever	1	0	1	0	0	1	1	0	0	1	1	1	0	1
Diarrhoea	57	40	22	50	27	33	40	28	34	21	23	20	21	17
Enteritis	10	5	2											
Erysipelas	10	9	5	0	0	0	3	4	9	8	11	4	5	2
Influenza	55	15	54	18	214	27	39	100	159	26	26	33	117	20
Puerperal Fever	7	11	2	7	3	8	2	5	5	8	8	9	5	5
Cerebro-Spinal Fever	3	5	2	0	4	4	9	7	2	2	4	1	3	4
Poliomyelitis	0	7	2	0	0	1	0	1	0	0	1	0	0	0
Encephalitis Lethargica	10	9	7	3	12	8	7	9	4	1	3	2	4	4
Pneumonia	245	168	208	187	284	206	238	244	229	225	135	192	171	154
Totals	554	340	366	294	632	311	369	431	484	331	246	280	367	250

N.B.—In calculating the Zymotic rate, all the above deaths have been included except pneumonia. Particulars of deaths from Tuberculosis are given on page 64.

TABLE 8.

Deaths during 1938 of Persons belonging to City of Leicester as classified by the Registrar General according to Disease, Sex and Age-period.

CAUSES OF DEATH.	Sex.	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
ALL CAUSES .. ..	M	1526	105	19	24	30	49	50	72	157	288	360	372
	F	1425	73	10	18	27	43	57	73	143	224	334	423
1. Typhoid and Paratyphoid Fevers	M	1	—	—	—	—	—	1	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
2. Measles .. ..	M	—	—	—	—	—	—	—	—	—	—	—	—
	F	1	1	—	—	—	—	—	—	—	—	—	—
3. Scarlet fever ..	M	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—
4. Whooping cough	M	6	1	4	1	—	—	—	—	—	—	—	—
	F	3	1	1	1	—	—	—	—	—	—	—	—
5. Diphtheria ..	M	19	—	—	9	10	—	—	—	—	—	—	—
	F	14	—	—	4	10	—	—	—	—	—	—	—
6. Influenza ..	M	10	—	—	—	1	1	—	1	2	1	—	4
	F	10	—	—	—	—	—	—	1	—	3	2	4
7. Encephalitis lethargica ..	M	2	—	—	—	—	1	—	—	—	1	—	—
	F	2	—	—	—	—	—	—	—	1	1	—	—
8. Cerebro-Spinal Fever .. ..	M	3	—	—	1	—	—	—	1	—	1	—	—
	F	1	—	—	—	—	1	—	—	—	—	—	—
9. Tuberculosis of respiratory system	M	94	1	1	—	—	13	17	15	15	21	11	—
	F	81	—	—	—	2	19	23	12	12	11	2	—
10. Other tuberculous diseases .. ..	M	14	2	2	2	3	1	1	1	—	2	—	—
	F	9	1	—	1	4	2	1	—	—	—	—	—
11. Syphilis .. ..	M	8	—	—	—	—	—	—	2	5	1	—	—
	F	3	—	—	—	—	—	—	1	1	1	—	—
12. General Paralysis of Insane, Tabes Dorsalis .. ..	M	7	—	—	—	—	—	—	1	3	2	1	—
	F	2	—	—	—	—	—	—	—	—	1	1	—
13. Cancer, malignant disease .. ..	M	193	—	—	1	1	1	2	8	21	43	84	32
	F	239	—	—	—	—	—	2	17	47	62	78	33
14. Diabetes .. ..	M	10	—	—	—	—	1	1	1	—	2	3	2
	F	25	—	—	—	—	—	—	—	1	5	9	10
15. Cerebral hæmorrhage, &c. ..	M	108	—	—	—	—	—	—	1	9	29	32	37
	F	125	—	—	—	—	—	—	3	10	23	41	48
16. Heart disease ..	M	369	—	—	—	—	7	2	3	35	75	113	134
	F	353	—	—	—	4	5	2	8	23	50	109	152
17. Aneurysm ..	M	6	—	—	—	—	—	—	—	1	2	2	1
	F	1	—	—	—	—	—	—	—	1	—	—	—

TABLE 8—continued.

CAUSES OF DEATH.	Sex.	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
18. Other Circulatory Diseases .. ..	M	60	—	—	—	—	—	—	—	4	13	16	27
	F	73	—	—	—	—	—	—	—	4	15	19	35
19. Bronchitis .. ..	M	33	—	1	1	—	—	2	—	4	5	8	12
	F	36	3	—	—	—	—	2	—	—	3	7	21
20. Pneumonia (all forms) .. ..	M	93	8	7	2	—	3	1	10	16	16	16	14
	F	61	6	6	4	3	—	3	6	7	2	13	11
21. Other respiratory diseases .. ..	M	9	—	—	1	—	—	—	—	1	3	2	2
	F	15	—	—	1	1	—	1	—	4	3	3	2
22. Peptic Ulcer .. ..	M	14	—	—	—	—	—	2	1	4	4	2	1
	F	4	—	—	—	—	—	—	—	1	1	1	1
23. Diarrhoea, &c. .. ..	M	17	12	—	—	—	2	1	—	1	—	1	—
	F	7	5	—	1	—	—	—	—	—	—	1	—
24. Appendicitis .. ..	M	9	—	—	—	4	2	1	—	1	—	1	—
	F	7	—	—	—	—	—	1	1	2	1	1	1
25. Cirrhosis of Liver	M	6	—	—	—	—	—	—	1	1	2	2	—
	F	1	—	—	—	—	—	—	—	1	—	—	—
26. Other Diseases of Liver, etc. ..	M	3	—	—	—	—	—	—	—	1	1	1	—
	F	8	—	—	—	—	—	1	—	1	1	2	3
27. Other Digestive Diseases .. ..	M	24	1	—	—	1	1	—	1	4	4	7	5
	F	27	1	—	—	1	—	1	2	4	5	4	9
28. Acute and chronic nephritis ..	M	52	1	—	—	—	1	1	1	6	12	17	13
	F	2	—	—	1	—	1	—	2	4	8	11	5
29. Puerperal sepsis .. ..	F	5	—	—	—	—	1	1	3	—	—	—	—
30. Other Puerperal Causes .. ..	F	5	—	—	—	—	2	2	1	—	—	—	—
31. Congenital debility, premature birth, malformation, etc.	M	72	71	—	—	—	—	1	—	—	—	—	—
	F	54	51	1	—	—	1	—	—	1	—	—	—
32. Senility .. ..	M	43	—	—	—	—	—	—	—	—	—	1	42
	F	50	—	—	—	—	—	—	—	—	—	2	48
33. Suicide .. ..	M	32	—	—	—	—	1	5	7	3	8	6	2
	F	18	—	—	—	—	2	3	4	6	2	—	1
34. Other violence .. ..	M	66	1	—	2	6	9	5	4	7	10	8	14
	F	41	2	—	2	—	6	3	1	2	4	6	15
35. Other Defined Diseases .. ..	M	142	7	4	4	4	5	7	12	13	30	26	30
	F	111	2	2	3	2	3	11	11	10	22	21	24
36. Causes Ill-defined or unknown ..	M	1	—	—	—	—	—	—	1	—	—	—	—
	F	1	—	—	—	—	—	—	—	—	—	1	—



VACCINATION

J. H. Lockwood, City Health Department

The work undertaken by the Vaccination Officer

Return respecting the Vaccination of Children whose births were registered from

Registration Sub-Districts comprised in the Vaccination Officer's District.	Number of Births returned in the "Birth List Sheets", as registered from 1st January to 31st December, 1937	Number of these Births duly entered by 31st January, 1939, in Columns I., II., IV. and V. of the "Vaccination Register" (Birth List Sheets), viz. :				
		Col. I.  Successfully Vaccinated	Col. II.		Col. IV. Number in respect of whom Statutory Declarations of Conscientious Objection have been received.	Col. V.  Died unvaccinated
			Insus- ceptible of Vaccination	Had Small Pox		
1	2	3	4	5	6	7
North West ..	1768	50	—	—	1664	47
North East ..	1500	73	—	—	1299	120
South .. ..	588	18	—	—	542	27
Total .. ..	3856	141	—	—	3505	194

Number of Children successfully vaccinated after the declaration

Total number of Certificates for year 1938 sent to other Vaccination

OFFICER. Table 9.

ment, Grey Friars, Leicester.

is summarised in the following table :—

1st January to 31st December, 1937, inclusive.

Number of these Births which on 31st January, 1939, remained unentered in the "Vaccination Register" on account (as shown by "Report Book") of			Number of these Births remaining on 31st January, 1939, neither duly entered in the "Vaccination Register" (columns 3, 4, 5, 6 and 7 of this Return) nor temporarily accounted for in the "Report Book" (columns 8, 9 and 10 of this Return).	Total number of Certificates and copies of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar Year 1938	Number of Statutory Declarations of Conscientious Objection actually received by the Vaccination Officer irrespective of the dates of birth of the children to which they relate, during the Calendar Year, 1938
Post-ponement by Medical Certificate	Removal to Districts the Vaccination Officers of which have been duly apprised	Removal to places unknown, or which cannot be reached ; and Cases not having been found.			
8	9	10	11	12	13
—	1	5	1	These figures are to be obtained from columns 2 and 6 of the Summary (Form N.).	
—	1	3	4	42	1541
—	—	1	—	107	1298
—	—	1	—	20	504
—	2	9	5	169	3343

of conscientious objection had been made .. .. Nil

Officers .. .. 1

TABLE 10.

Return showing the numbers of Persons successfully vaccinated and re-vaccinated at the cost of the rates by the Medical Officers of the Poor Law Institution and the Public Vaccinators during the year ended 31st December, 1938.

Name of the Poor Law Institution or Vaccination District	Name of the Medical Officer or Public Vaccinator	Numbers of Successful Primary Vaccinations of Persons :—			Numbers of Successful Re-vaccinations, i.e., of persons who had been successfully vaccinated at some previous time	Observations
		Under one year of age	One year and upwards	Total		
Swain St. Institution ..	Dr. E. C. Hadley	—	—	—	—	
City General Hospital ..	Dr. E. C. Hadley	—	—	—	—	Of the
North West District ..	Dr. J. W. Fordham	42	4	46	—	Vaccinations
North East District ..	Dr. J. W. Fordham	20	2	22	—	of children
South District ..	Dr. A. J. L. Speechley	107	7	114	—	under one
	Totals .. ..	169	13	182	—	year, 49
						were private



## MEASLES.

One death occurred from this disease in 1938, compared with ten in 1937. The death-rate was 0.004 per 1,000.

This disease has a tendency to occur in waves, one year being free from epidemic and the next perhaps having a serious outbreak. It is a serious disease and especially so in the case of children under five years of age. The child who died was under five years old. It is vitally important that such children should be protected from all possible contact with sufferers from the disease. 1938 was an "inter-epidemic" year.

Serum treatment for prevention of the disease is available at the Isolation Hospital.

## SCARLET FEVER.

Notifications, 549. Deaths, one.

The incidence of the disease was much the same as in 1937.

One death occurred in a late septic case—nowadays a very rare occurrence.

## WHOOPING COUGH.

Nine deaths occurred, as compared with 11, 11, 16, 6, and 13 for the previous five years. All the deaths in 1938 were in children of under five years of age. This is as usual and too much emphasis cannot be placed on the importance of avoidance of the disease if at all possible in children of these tender years, and of the greatest care of the little patient who has been unfortunate enough to contract it.

**TABLE 11.**  
**MEASLES AND WHOOPING COUGH DEATHS AND MORTALITY**  
**per 1,000 BIRTHS.**

Quinquennial Period.	Births.	Measles Deaths.	Mortality per 1,000 Births.	Whooping Cough Deaths.	Mortality per 1,000 Births.
1902-6 ..	30,065	312	10.3	354	11.1
1907-11 ..	27,247	420	15.4	191	7.0
1912-16 ..	25,139	437	17.3	190	7.5
1917-21 ..	21,710	248	11.4	134	6.1
1922-26 ..	21,935	120	5.5	164	7.4
1927-31 ..	19,256	55	2.8	109	5.6
1932-36 ..	17,599	48	2.7	62	3.5
1937-38 ..	7,680	11	1.4	20	2.6

## **TYPHOID FEVER.**

Five cases were notified, with one death. In 1937, 13 cases occurred, in 1936, twelve.

Of the five cases, four were true cases of enteric fever, and one was a case of paratyphoid infection.

The patient who died was a man aged 26.

In no instance was it possible to demonstrate a City source of infection, and undoubtedly several of the cases contracted the disease outside the city.

## **DIPHTHERIA.**

701 cases were notified and 33 deaths occurred.

The type of diphtheria organism was of the most severe and the number of deaths exceeds any year since 1926. A fuller discussion on this side of the subject will be found in the report of the Medical Superintendent of the Isolation Hospital, on page 85.

The severity of the disease emphasises the necessity of pressing on with the Immunisation Campaign.

### **Immunisation against Diphtheria.**

A full report of the Immunisation Scheme was given in my Report for 1937 on page 21. The methods etc., which were used in 1938 are as there detailed. No change has been made in the material used.

It is again satisfactory to note that no immunised child has died from Diphtheria and that although a certain number of immunised children subsequently contracted the disease, the attack was invariably mild although the infecting organism was often of the most serious type.

It is difficult to appreciate the *laissez-faire* attitude of parents who neglect this very real advance in medical practice.

Immunisation protects the individual and if sufficient individuals are protected, the community (including unprotected individuals) will cease to be troubled by this disease. Until more children are immunised, however, no diminution in the general attack rate of the community can be expected. (See 1937 Report. Page 25.)

Diphtheria Immunisation Scheme, commenced 1st May, 1937.

Statistics for 1937 and 1938.

Table A.				1937	1938	Total
Total number of children completely immunised .. .. .				2,945	4,189	7,134
Total number of children partially immunised .. .. .				45	30	75
Total number of injections given .. ..				7,870	12,608	20,478
,, ,, Schick tests performed.. ..				532	352	884
,, ,, clinics held .. ..				103	158	261
,, ,, lectures given .. ..				15	14	29
,, ,, parents at lectures (approx.) .. ..				1,547	703	2,250

Note.—“Completely immunised” means “has had full course of injections but not necessarily the terminal test.” “Partially immunised” means “has had one or two injections only.”

Table B.							
		1937		1938		TOTAL	
<i>Number of Individual Children.</i>		<i>Completely Immunised</i>					
		<i>City Scheme</i>	<i>Private Doctor</i>	<i>City Scheme</i>	<i>Private Doctor</i>	<i>City Scheme</i>	<i>Private Doctor</i>
Under three years of age		478	14	1,129	9	1,607	23
Three—five	„	833	23	1,210	9	2,043	32
Five—eight	„	1,312	37	1,572	15	2,884	52
Eight—ten	„	157	5	161	11	318	16
Over ten	„	77	9	59	14	136	23
		2,857	88	4,131	58	6,988	146
		<i>Partially Immunised</i>					
		<i>City Scheme</i>	<i>Private Doctor</i>	<i>City Scheme</i>	<i>Private Doctor</i>	<i>City Scheme</i>	<i>Private Doctor</i>
Under three years of age		12	—	4	—	16	—
Three—five	„	10	—	11	—	21	—
Five—eight	„	23	—	15	—	38	—
Eight—ten	„	—	—	—	—	—	—
		45	Un-	30	Un-	75	Un-
		—	known	—	known	—	known

<i>Results of Terminal Schick Test.</i>				1937	1938	Total
Number positive .. .. .				11	2	13
Number negative .. .. .				454	227	681
				465	229	694



Details of children who have had full course of injections (i.e., three), and who have been subsequently admitted to hospital suffering from Diphtheria, or as Carriers.

**Table C.**

No.	Age.	Sex.	Date of last immunising injection.	Date of admission to hospital.	Remarks.
1.	9	F.	9.11.37	13.11.37	Nasal diphtheria.
2.	O 10	M.	4.12.37	18. 2.38	Carrier.
3.	O 6	F.	20. 7.37	27. 2.38	Carrier.
4.	7	F.	13.11.37	5. 3.38	Tonsillar Diphtheria. Gravis type.
5.	5	M.	17. 2.38	14. 3.38	Tonsillar diphtheria. Gravis type.
6.	O 8	M.	6. 1.38	14. 3.38	Carrier.
7.	8	F.	3. 1.38	27. 3.38	Clinical case of diphtheria. Mild diphtheria.
8.	6	M.	27. 7.37	30. 4.38	Gravis type. Mild diphtheria.
9.	3	M.	29. 7.37	10. 6.38	Very mild diphtheria. + Swab on admission.
10.	7 $\frac{5}{12}$	M.	18. 8.38	17. 9.38	Mild diphtheria. Gravis type.
11.	5	F.	20.11.37	1.10.38	Mild diphtheria. Gravis type.
12.	7	M.	7.10.38	17.10.38	Very mild diphtheria. (Schick negative. Gravis type).
13.	5	F.	19. 5.38	19.11.38	Mild faucial, infecting organism Gravis.
14.	9	M.	9.12.37	16.12.38	Mild diphtheria. Gravis type.



From the outset of the scheme, approximately 7,000 children have been immunised. In not one single case have the immediate after-effects of the injections been a cause for serious alarm. One child who was found on investigation to be an asthmatic, had an acute anaphylactic shock at the injection, but soon recovered. A few children have had sore—that is, reddened—arms for a day or so, but parents are always warned that this can occur and that it is of no moment.

It is satisfactory to note that more children under five years of age have been immunised. The percentage for 1938 was 57 per cent. as compared with 44 per cent. in 1937. This is the period of greatest risk and so it is desirable that as many children as possible should be protected before they reach school age.

Full details are given in Table C of all children known to the Department who have been admitted to Hospital suffering from or suspected to be suffering from Diphtheria or having positive swabs on examination.

Fourteen such children were admitted. A careful study of Table C will show the following facts :—

- (a) Of the 14 children, three (Nos. 2, 3 and 6) were not ill—they were “carriers.”
- (b) Of the remaining 11 children, five (Nos. 1, 5, 10, 12, and 14) cannot really be considered to come within the scope of the problem. They had all been immunised but an insufficient time had elapsed after the last injection for the protection to take effect. In any event the illness was invariably of a mild type.
- (c) The remaining six children all had true attacks of diphtheria, in every case very mild, although in four cases (Nos. 4, 8, 11 and 13) the infecting organism was of the gravis or most serious type.

Since the inception of the scheme out of 7,000 children immunised, twelve or 0.17 per cent. (1 in 590) have subsequently developed a mild attack of diphtheria—no child has died.

There are in the City some 35,000 children under 10 years of age, or 7,000 immunised and 28,000 unimmunised. In 1938 among these 28,000 latter children nearly 700 cases of diphtheria occurred with 33 deaths, an attack rate of 1 in 40 and a death rate of 1 in 850, compared with an attack rate of 1 in 590 and no deaths among the immunised.

## INFLUENZA.

In 1937 a severe outbreak occurred but in 1938 the city was spared from this disease practically entirely. Only 20 persons died, the majority in the later decades of life.

## PNEUMONIA.

				<i>Cases Notified.</i>	<i>Deaths.</i>
1938	..	..	..	385	154
1937	..	..	..	520	171
1936	..	..	..	301	192
1935	..	..	..	239	135

Analysing the cases that died in 1938 according to age, we find :—

<i>Age.</i>		<i>Deaths.</i>
0-4 years	..	33
5-14 „	..	3
15-24 „	..	3
25-34 „	..	4
35-54 „	..	39
55 and over	..	72
		<hr/>
Total	..	154
		<hr/>

It is obvious that pneumonia is particularly a disease of the two extremes of life.

As usual, the mortality was greater among males—93 cases to 61 females.

## BRONCHITIS.

69 deaths were assigned to this cause, as compared with 120 in 1937. 33 were males, 36 females.

60 occurred in persons of 45 years of age and older.

## MALIGNANT DISEASE (CANCER).

432 deaths occurred in 1937.

The cancer deaths and death-rate for previous years are shown in Table 12. It will be seen that the number of deaths from cancer is the largest yet recorded.

TABLE 12. DEATHS FROM CANCER, 1938.

Tabulated as to Age, Sex and Organ Affected,  
in accordance with local classification.

Organ Affected.	Under 40 years.		40-60 years.		Over 60 years.		All Ages.	
	M.	F.	M.	F.	M.	F.	M.	F.
Lip .. ..	—	—	—	—	2	—	2	—
Tongue .. ..	—	—	—	—	3	—	3	—
Jaw .. ..	—	—	—	—	3	1	3	1
Mouth .. ..	—	—	1	—	4	—	5	—
Larynx .. ..	—	—	1	1	—	3	1	4
Oesophagus .. ..	—	—	—	3	4	2	4	5
Stomach .. ..	—	1	9	5	31	24	40	30
Intestines .. ..	—	—	3	1	10	5	13	6
Colon .. ..	1	—	6	2	17	17	24	19
Rectum .. ..	—	—	2	7	17	8	19	15
Liver .. ..	—	—	1	5	8	10	9	15
Pancreas .. ..	—	—	3	—	3	3	6	3
Spleen .. ..	—	—	—	—	—	—	—	—
Lungs .. ..	—	—	11	5	5	4	16	9
Kidney .. ..	1	—	2	—	—	2	3	2
Bladder .. ..	—	—	3	4	6	5	9	9
Prostate .. ..	—	—	—	—	10	—	10	—
Testicle .. ..	—	—	—	—	—	—	—	—
Ovary .. ..	—	1	—	5	—	6	—	12
Uterus .. ..	—	1	—	15	—	16	—	32
Breast .. ..	—	1	—	31	—	21	—	53
Bones .. ..	2	1	—	2	2	4	4	7
Other Forms or not specified .. ..	3	—	2	4	12	3	17	7
Total .. ..	7	5	44	90	137	134	188	229

**TABLE 13.**  
**CANCER STATISTICS, 1904-38.**  
**(Calculated locally)**

Year.	Total Cancer Deaths.	Cancer Deaths— per cent. of Total Deaths.	Cancer Death- rate per 100,000 Population.
1904 .. ..	213	6.5	98
1905 .. ..	180	5.8	82
1906 .. ..	168	5.0	76
1907 .. ..	199	6.6	89
1908 .. ..	214	6.8	95
1909 .. ..	195	6.1	86
1910 .. ..	200	7.1	88
1911 .. ..	236	7.7	103
1912 .. ..	226	7.2	98
1913 .. ..	252	8.1	109
1914 .. ..	269	8.1	115
1915 .. ..	219	6.4	94
1916 .. ..	228	7.3	100
1917 .. ..	255	8.6	117
1918 .. ..	309	7.9*	132
1919 .. ..	249	8.0	108
1920 .. ..	257	8.9	104
1921 .. ..	307	10.6	129
1922 .. ..	276	9.0	116
1923 .. ..	274	9.8	114
1924 .. ..	281	9.5	116
1925 .. ..	318	10.1	131
1926 .. ..	395	13.2	163
1927 .. ..	324	10.6	132
1928 .. ..	349	12.7	142
1929 .. ..	357	10.4	145
1930 .. ..	372	13.5	151
1931 .. ..	357	11.9	148
1932 .. ..	356	11.8	148
1933 .. ..	367	11.9	152
1934 .. ..	377	13.3	156
1935 .. ..	384	12.9	150
1936 .. ..	392	12.9	150
1937 .. ..	366	11.2	139
1938 .. ..	417	14.1	158

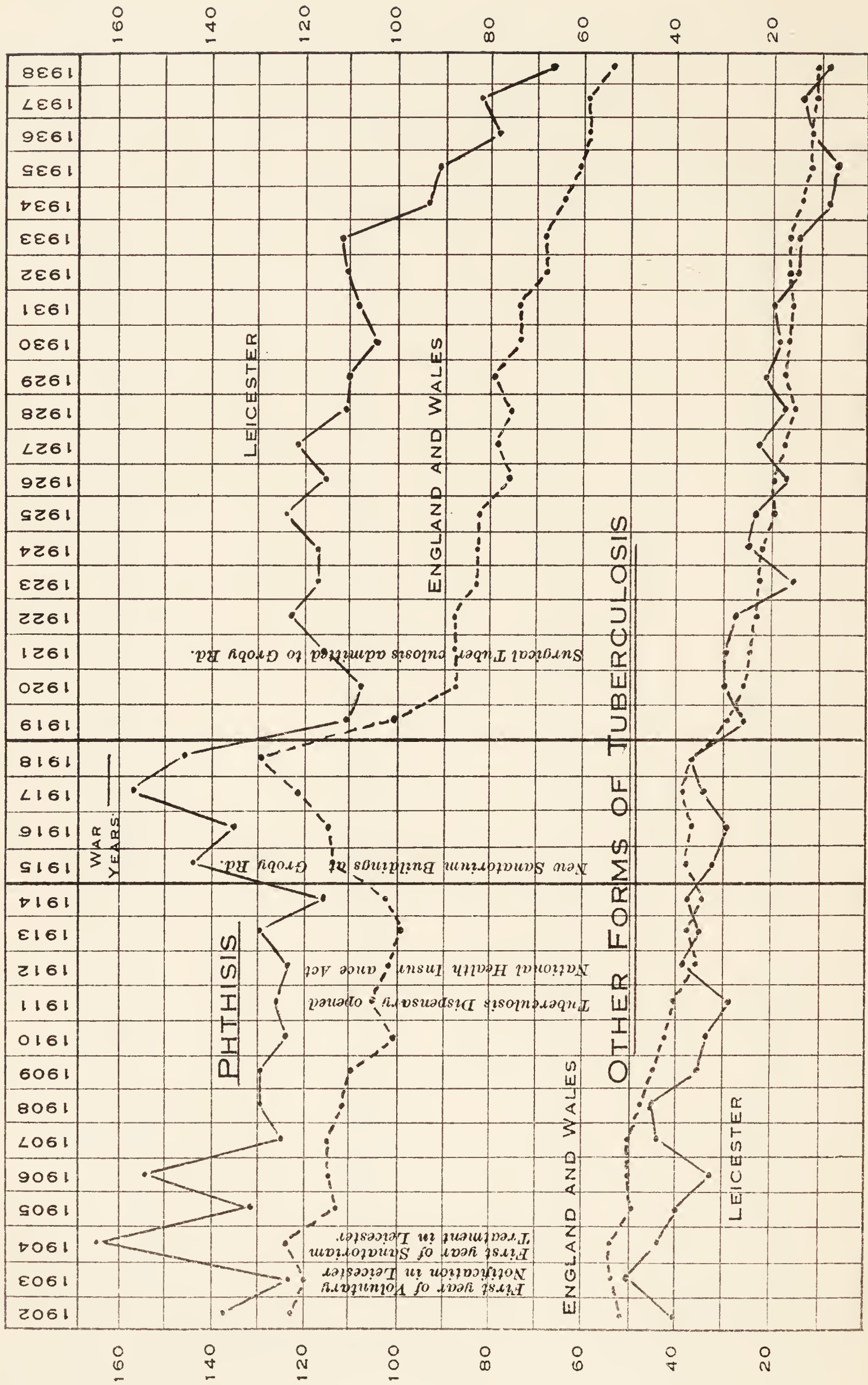
\*In 1918 the total deaths from all causes were very high so that the per cent. figure was proportionately lower.





GRAPH 3

TUBERCULOSIS MORTALITY PER 100,000 POPULATION  
1902 — 1938



UPPER CURVES—PHTHISIS

FULL LINE— LEICESTER

LOWER CURVES—OTHER FORMS OF TUBERCULOSIS

BROKEN LINE—ENGLAND AND WALES

The classification of cancer deaths in age groups is as follows :—

	DEATHS.		
	Males.	Females.	Total.
Under 25 years .. ..	3	—	3
25-34 years .. ..	2	2	4
35-44 „ .. ..	8	17	25
45-54 „ .. ..	21	47	68
55-64 „ .. ..	43	62	105
65 and over .. ..	116	111	227
Totals .. ..	193	239	432
Comparable figures for 1937	151	226	377

The disproportion between the sexes continues to be marked and also the late incidence of the disease.

### Arrangements for Diagnosis and Treatment.

A full discussion of these will be found in my report for 1936, page 24. There has been no change in the year under review.

### TUBERCULOSIS.

The number of fresh cases notified and deaths registered during 1938 was as follows (corresponding figures for 1937 in brackets) :—

	Cases		Deaths	
Pulmonary Tuberculosis ..	310	(345)	174	(217)
Other forms .. ..	84	(88)	23	(38)
Total .. ..	394	(433)	197	(255)

Full discussion on the position of Tuberculosis in the City will be found in the report of the Tuberculosis Officer, on page 59.

It is sufficient here to note that the year 1938 showed considerable improvement on 1937 and previous years.



## MATERNAL MORTALITY.

Perhaps the brightest spot in the mortality rates for 1937 was that for maternal mortality. Only five deaths occurred.

In 1938 this excellent position was not maintained as 9 deaths occurred, but compared with previous years this number is not excessive and still bears favourable comparison with the country as a whole.

The comparative figures for the last few years are as follow :—

	1935	1936	1937	1938
Deaths from sepsis ..	8	9	5	5
Deaths from other puerperal causes ..	14	4	0	4
Total deaths ..	22	13	5	9
Death rate from sepsis ..	2.1	2.3	1.3	1.25
„ „ other puerperal causes ..	3.8	1.0	0.0	1.0
Total death rates ..	5.9	3.3	1.3	2.25

Further discussion will be found in the report of the Medical Officer for Maternity and Child Welfare, page 185.

## DEATHS FROM VIOLENCE.

Included under this heading are 50 deaths from suicide (32 males and 18 females) (36, 23, and 13 respectively, in 1937), 43 deaths from road accidents (29 males and 14 females) (29, 20 and 9 in 1937), and 64 deaths from other types of violence (65 in 1937), totalling in all 157 deaths (98 males and 59 females) (130, 77 and 53 in 1937).

It will be seen that the number of deaths under this heading has shown an unwelcome increase.

**SECTION B.**

---

**General Provision of Health  
Services for the Area**





## SECTION B.

### General Provision of Health Services for the Area

1. (i) Full particulars of the Public Health Officers of the Authority are incorporated at the beginning of this Report.

(ii) (a) **Laboratory Facilities.**

**Public Analyst.** No change. See special report in Appendix V, Page 195.

**Pathologist.** No change.

(b) **Ambulance Service.**

**City Isolation Hospital.** Two ambulances are provided at this hospital for the removal of infectious patients. There has been no change in this service during 1938.

**City General Hospital.** The ambulance service for this hospital is provided by the City Fire Brigade Department. There has been no change in this service during 1938.

**Westcotes Maternity Home.** Patients make their own arrangements.

(c) **Nursing in the Home.** No change.

(d) **Clinics and Treatment Centres.** No change.

**Accommodation for the Central Office of the Health Department and certain Clinic Services.**

In previous reports, comment has been made on the inadequacy of the Central Office premises. During 1938, the matter received further attention and it is hoped that a definite decision will be reached early in 1939.

(e) **Hospitals : Voluntary and Public :—**

## VOLUNTARY.

**The Royal Infirmary, Leicester.** The following details are obtained from the Annual Report of the Royal Infirmary for 1938 :—

<i>In-Patients.</i>	1936	1937	1938
Remaining in on 1st January	346	423	428
Admitted .. .. .	8,066	7,963	8,267

### *Children's Hospital :—*

Remaining in on 1st January	50	63	54
Admitted .. .. .	1,322	1,279	1,409
	9,784	9,728	10,158

The average daily number of beds occupied during the same three years was respectively :—

513.7          529.4          534.3

The average stay per in-patient in 1938 was 20.6 days.

The number of operations increased from 6,288 in 1937 to 6,653 in 1938.

The average cost per occupied bed was £161.

195 patients died within 48 hours of admission.

2,153 in-patients in an early stage of recovery were transferred to Convalescent Homes where they remained for an average stay of 18.5 days.

<i>Out-Patients.</i>	1936	1937	1938
New Patients .. .. .	16,379	18,932	19,458
Renewed attendances .. .. .	54,809	64,199	61,507
	71,188	83,131	80,965

### *Casualties.*

New patients .. .. .	23,868	24,923	25,561
Renewed attendances .. .. .	89,641	92,942	91,894
„ „ Fracture clinic from 18th May, 1936	6,028	10,272	10,137
	119,537	128,137	127,592

<i>Casualties</i>				1936	1937	1938
Operations	..	..	..	5,905	5,839	6,653
Radiography :—						
X-Ray Department attendances	..	..	..	23,267	22,212	22,051
Fluorescent screen examinations	..	..	..	10,384	9,325	9,268
X-Ray photographs taken	..			37,307	39,327	39,127
X-Ray Treatments :						
Deep Therapy	..	..	..		5,551	7,045
Superficial	..	..	..	..	709	618
Examinations	..	..	..		1,331	1,612
				4,458	7,591	9,285
Ultra Violet Ray treatments				8,020	8,311	8,114
Radium treatments	..	..		613	834	944
Pathological and Bio-Chemical Departments :—						
Examinations made	..			24,848	25,891	26,690
Orthopaedic Department (Massage and Electrical) :—						
Number of attendances	..			49,624	47,433	51,164
Number of treatments :—						
Massage	..	..	..	58,512	59,922	65,248
Electrical	..	..	..	33,066	31,871	33,989
Total treatments	..			91,578	89,793	99,237

### Extensions to the Royal Infirmary.

(a) In September, 1937, an additional storey to the Out-Patients' Department was commenced. This will provide additional facilities for this department.

(b) It is proposed to construct a new Casualty and X-ray Department on the other side of New Bridge Street, to be connected with the main building by a bridge over the roadway.

(c) It has been decided to erect a Home for the domestic staff adjoining the Infirmary grounds at the corner of Aylestone Street and New Bridge Street.

**The Leicester Faire Hospital.** No change.



**The Fielding Johnson Private Hospital.** No change.

**Highfield Hospital.** No change.

**The Leicester and Leicestershire Maternity Hospital, Leicester.**

No change.

#### **PUBLIC.**

**The City General Hospital, Leicester.**

See special report in Appendix III, page 111.

**The City Isolation Hospital and Sanatorium, Groby Road.**

See special report in Appendix II, page 83.

**The Municipal Maternity Home, Westcotes Drive.**

See special report in Appendix IV, page 180.

**City Mental Hospital, West Humberstone.** No change.

2. (i) Institutional medical services transferred under the Local Government Act, 1929. No change.

(ii) Poor Law Medical Out-Relief. No change.

(iii) Institutional provision for the care of Mental Defectives :—

**Leicester Frith Certified Institution.** No change.

3. (i) Midwifery and Maternity Services. See special Section, page 169.

(ii) Institutional Provision for Mothers or Children. See special Section, page 151.

(iii) Health Visitors. See special Section, page 149.

(iv) Child Life Protection. See special Section, page 151.

(v) Arrangements for Dental, Orthopaedic Treatment, etc. See special Section, page 167.

4. Maternity and Nursing Homes. See special Section, page 183.

## 5. The Leicester and County Saturday Hospital Society.

One of the most important and successful voluntary health institutions in Leicester is the Saturday Hospital Society.

By means of a voluntary weekly levy (2d. per week, now increased to 3d.), which is “automatically” deducted from wages, a really wonderful amount of money is subscribed by the weekly wage-earners of the City and County for the purpose of supporting the Royal Infirmary, of maintaining two fine Convalescent Homes, as well as rendering other important health services.

Last year (1938), a fresh record was again established, the total amount collected being the really magnificent sum of £63,453.

3,837 persons received benefit during the year, of whom 1,672 were sent to Overstrand Hall, 418 to Roecliffe Manor, and 1,075 patients were treated in the City General Hospital.

Not the least benefit the Saturday Hospital Society provides for its subscribers is free treatment at the City General Hospital.

## 6. Public Abattoir.

No further progress has been made towards the erection of a Public Abattoir. The delay is no doubt unavoidable but it is unfortunate as the need is great.

## 7. Meteorology.

In 1937 a complete Meteorological Station was established at the City General Hospital. A report on the working of this Station will be found in Appendix III, page 145.

## 8. Cremation.

I am indebted to Mr. A. C. Addison, Superintendent Registrar, for the following facts and figures, which are taken from his Annual Report for 1938 :—

The following figures show the progress of cremation since its inception in Leicester :—

<i>Period.</i>	<i>Cremations.</i>	<i>Annual Average.</i>
1903-1912	125	12.5
1913-1922	260	26.0
1923-1932	727	72.7
1933-1937	812	162.4
1938	234	234

In the country as a whole, 16,255 cremations were carried out as compared with 14,129 in 1937.

This most hygienic method of disposal is showing a slow but satisfactory increase in popularity.

## 9. Air Raid Precautions.

During the year 1938, considerable progress has been made towards the formulation of a complete scheme.

The crisis in September naturally expedited progress of the scheme, a brief description of which, as it now stands (May, 1939), follows:—

### First Aid Posts.

#### *General Organisation.*

Ten fixed, two mobile and one point have been provisionally approved. Detailed plans showing the necessary adaptation of the buildings have been prepared for consideration by the Ministry of Health.

It is proposed that the following first aid posts shall be established.

Granby Halls.  
Bond Street Public Medical Service.  
Swain Street Public Assistance Institution.  
Cossington Street Baths.  
Spence Street Baths.  
St. John's Church Rooms, Clarendon Park.  
Broughton Road School Clinic.  
St. Philip's Church Rooms, Evington.  
Cort Crescent Clinic.  
Holy Apostles' Church Rooms.  
Evington Village Hall (Point).  
Bond Street (Mobile).  
Spence Street (Mobile).

#### *Personnel.*

196 men and 980 women are required to staff the above posts. The majority of the women, but only a few of the men, have been recruited and trained.

A Medical Officer has been appointed to be in charge of the post in peace or in war, and he will be assisted by a Senior St. John Ambulance Brigade Officer.



## First Aid Parties.

### *General Organisation.*

The City has been divided into seven geographical divisions, and depots allocated to each division. In all there are to be 88 first aid parties of four men and a driver on duty whole-time in war, which are located at 16 depots in the seven divisions.

It is proposed that first aid party depots shall be established, as follow :—

<i>Division.</i>	<i>Depot.</i>
A.	24, Halford Street. Swain Street Public Assistance Institution. Old Milton Street School.
B.	College of Art and Technology. Granby Halls.
C.	Friday Street. Jarvis Street.
D.	Payne Street. Abbey Park Road.
E.	Uppingham Road. Evington Valley Road.
F.	Crusaders' Hall, Clarendon Park. Gas Works, Aylestone. Southfields Drive.
G.	Hinckley Road. Narborough Road.

### *Personnel.*

880 men will be required to allow for working shifts. Approximately 500 men have been recruited and trained. In addition, women drivers are required for cars for sitting casualties, of which one will be attached to each party, or 88 in all. For the service, 264 women drivers are required, and about 50 have been recruited.

## Transport Section.

### *Ambulances and Cars.*

132 ambulances will be required and trade vans have been earmarked for this service.

In addition, 88 cars will be required for transport of sitting casualties (see above), and a similar number for transport of stretcher party personnel.



To drive the ambulances, 396 women are required, and of this number, nearly 300 have been recruited and trained.

### *Garages.*

These have been ear-marked for accommodation of ambulances and cars wherever available.

## **Hospitals.**

### *General.*

A scheme of affiliation has been drawn up by the Hospital Officer of the Ministry of Health whereby the main Leicester Hospitals are designated casualty clearing hospitals. From these hospitals, at the outbreak of war and daily as required afterwards, patients will be cleared (a) by decant to affiliated hospitals in the City and County of Leicester or (b) by sending home. A total of 5,000 beds will be thus made available (a) by putting up additional beds in the wards and (b) by utilising other accommodation.

### *Equipment.*

Very considerable supplies of equipment, both medical and non-medical, are being received from the Ministry of Health. They are being stored in the first instance at the Royal Infirmary or City General Hospital but arrangements for distribution are in hand.

### *Personnel.*

(a) *Medical.* A proposed allocation of personnel available has been made and a meeting held with interested persons. The final allocation is in the hands of the Central Emergency Committee for the Medical Profession which has a local committee.

Each group of affiliated hospitals has a surgical unit with surgeon, assistant, anaesthetist, and theatre staff allocated to it with the other necessary consultants.

(b) *Nursing.* The Civil Nursing Reserve is being recruited to supply this need. Approximately 1,500 nurses in all will be required. Untrained volunteers are being trained in First Aid, Home Nursing and at the Royal Infirmary or City General Hospital. About 300 are now enrolled.

(c) *Clerical, etc.* These are under the Women's Voluntary Service, which is allocating volunteers for this purpose.

### *Transport.*

This is required for decant and is being arranged by the Ministry of Health.

### **General Comments on A.R.P.**

The work of organisation of the Medical Services of the City under the A.R.P. Scheme has laid a burden on the staff that has at times been well nigh unbearable. Nevertheless, it has had to be carried even though much of the ordinary work of the department has suffered in consequence.

It is said that the occasion finds the man, but it is pleasing to be able to place on record that the September crisis found a host of men and women willing as volunteers to do all they could to help their City and their Country. In particular, as far as the Medical and First Aid Service is concerned, I must again mention the magnificent work carried out by the personnel, from the Commissioner down to the last Private or Nursing Sister of the St. John Ambulance Brigade.

The vast work of training thousands of recruits has fallen on their shoulders, and without their assistance, the task would have been insuperable.

A new branch of the Health Department, under the Ambulance and A.R.P. Officer (Mr. L. Lee), with clerical assistance, has been established.

The organisation of the Civil Nursing Reserve, with the object of recruiting and training some 1,500 auxiliary nurses to serve in our augmented hospitals, has been placed in the hands of Dr. E. B. Berenice Humphreys, who, too, has carried out a difficult task well.

Many matters still require consideration, such as, for example, the protection of hospital buildings, the allocation of equipment to the different posts, the recruitment of additional personnel, but a start has been made in this new branch of the service and should the necessity ever arise, the presence in the City of the many trained volunteers would surely help to minimise the disaster.



SECTION C.

---

**Sanitary Circumstances of  
the Area**





## SECTION C.

### Sanitary Circumstances of the Area

#### 1. (i) Water.

I am indebted to the courtesy of Mr. G. T. Edwards, M.I.C.E., Water Engineer, for the following information :—

“There have been no new sources of water supply during the past year, and the only extensions of mains within the City have been those to the various building estates.

“The local watersheds have been inspected weekly for any possible sources of contamination.

“The supply has been satisfactory, both in quality and quantity.

“The daily consumption throughout the authorised area increased by an average of 156,000 gallons per day over the previous year.”

Following the receipt of a circular from the Ministry of Health, it was decided, in April, 1938, that all new workmen should be medically examined, with particular reference to the possibility of their being typhoid carriers, and that the health of all employees suffering from any complaint of an intestinal character should be carefully investigated.

At the end of July the water in Thornton reservoir, owing to the growth and subsequent death in huge numbers of an alga (microcystis), became so unpleasant to drink that it was necessary to disconnect this source of supply for a total of seven weeks. The trouble was overcome by chemical treatment and flushing out the bottom water.

#### (ii) Drainage and Sewerage.

I am indebted to the courtesy of Mr. A. T. Gooseman, M.I.C.E., City Engineer and Surveyor, for the following information :—

#### “Sewerage.

“During the year 1938, 6.50 miles of new sewers have been laid ranging in diameter from 54 in. to 9 in. and consisting of 1.34 miles of foul and 5.16 miles of storm sewers.

“The 54 in. Storm Overflow at Aylestone has been completed and also the New Parks Main Valley Sewer ; other foul water sewers have been laid in Groby Road, Abbey Lane, Hallam Crescent, Wigston Lane, Grosvenor Street, and various portions of the inner Ring Road.

“The storm sewers in connection with the Spencefield Lane Improvement have been completed with outfalls on Uppingham Road and Shady Lane. The storm sewers for the Groby Road Improvement are well in hand and the 30 in. relief storm sewer from Clarendon Park to the Saffron Brook has been completed. Other sewers have been laid in Evington Hill, Abbey Lane and Scraftoft Lane, whilst a 21 in. storm sewer has been laid near Fosse Road North to assist in preventing the flooding under the Railway Bridge.

### **“Sewage Disposal.**

“The total flow of sewage during the year to the disposal works was 4,746,319,000 gallons and 143,510 tons of sludge were dealt with on the land.

“The effluents from the Farm and Low Level Disposal Works which are regularly analysed by the Resident Chemist have been satisfactory throughout the year.

“The Chlorination plant installed at the Abbey Pumping Station in 1937 has been regularly in use for the chlorination of storm water and also for crude sewage during very dry periods in the summer, and beneficial results have been obtained.

“Good progress is being made with the scheme of Extensions to the Sewage Disposal Works sanctioned by the Ministry of Health at an estimated cost of £91,000. Contracts amounting to £37,000 have been let for pumping machinery and for the 15 in. Cast Iron Rising Main from Belgrave Pumping Station to Beaumont Leys Farm, and will, it is anticipated, be completed before the end of 1939. Tenders are now about to be invited for the 1,000,000-gallon daily dry-weather flow Partial Activated Sludge plant and the Sludge Digestion plant at Beaumont Leys Works, and work on this part of the scheme will shortly be commenced.

## **2. “Rivers and Watercourses.**

“The Main River is under the control of the River Trent Catchment Board. The work of dredging, however, is carried out for them by the Corporation and, in addition, the River is

regularly patrolled within the City Boundaries and floating debris, dead animals, etc., disposed of.

“All streams and watercourses within the City are inspected and cleansed where necessary. This work includes the straightening, widening and grading of the invert to prevent pools of stagnant water forming. In this respect particular mention may be made of work carried out on further portions of the Evington and Saffron Brooks.

### 3. (i) **Closet Accommodation.**

See page 232.

### (ii) **Public Cleansing.**

No important change has taken place in the method of refuse disposal. During the year the refuse destructors at Mill Lane and West Humberstone dealt with 39,000 tons of refuse and 44,000 tons were disposed of at Controlled Tips. This latter method of disposal is proving very successful, not only as a method of disposal, but in reclaiming the sites used for tipping.

(iii) **Sanitary Inspection of the Area.** See page 226.

(iv) **Shops and Offices.** See page 251.

(v) **Camping Sites.** See page 231.

(vi) **Smoke Abatement.** See pages 145, 212 and 252.

(vii) **Swimming Baths and Pools.** See page 208.

(viii) **Eradication of Bed Bugs.** See page 233.

These matters are all dealt with in the reports of the Chief Sanitary Inspector and Public Analyst.

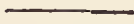
### 4. **Schools.**

Reference should be made to my report as School Medical Officer.





**SECTION D.**



**HOUSING**



## SECTION D.

# H O U S I N G

### New Houses.

During the year 1938, 1,742 new houses were erected within the City. Of these, 1,117 were built by private enterprise, and 625 by the Housing Committee.

The houses erected by the Housing Committee were allocated as follows :—

**Braunstone Estate**    ..    ..    ..    ..    ..    625

The following Table shows the number of houses built during the last ten years :—

NUMBER OF NEW HOUSES ERECTED, 1929-1938.				
Year.	By Private Enterprise.		By Housing Committee.	Total.
	Without subsidy.	With subsidy.		
1929	348	680	396	1,424
1930	583	—	505	1,088
1931	632	—	372	1,004
1932	792	—	584	1,376
1933	1,085	—	62	1,147
1934	1,493	—	82	1,575
1935	1,800	—	245	2,045
1936	1,798	—	416	2,214
1937	1,497	—	769	2,266
1938	1,117	—	625	1,742
Totals ..	11,145	680	4,056	15,881

**Note :** The figures prior to 1935 relate to the City previous to extension.

### SLUM CLEARANCE.

Up to the end of 1937, the progress of slum clearance is shown by the following figures :—

(a) Old houses in scheme	..    ..    ..	3,855
(b) Old houses in scheme confirmed	..    ..	3,155
(c) Population in (a)	..    ..    ..	12,612
(d) Population in (b)	..    ..    ..	10,608
(e) New houses required to replace	..    ..	3,697
(f) Number of old houses demolished	..	1,439



At the end of 1938, it was possible to report further progress, as follows :—

(a) Old houses in scheme .. .. .	5,099
(b) Old houses in scheme confirmed .. .. .	3,785
(c) Population in (a) .. .. .	16,493
(d) Population in (b) .. .. .	12,399
(e) New houses required .. .. .	4,915
(f) Number of old houses demolished .. .. .	2,272

Owing to the very large amount of extra work occasioned by A.R.P., slum clearance progress was not quite so rapid as in the previous two years. But at the end of 1938, a series of large areas totalling 1,234 houses, largely situated on the east side of Wharf Street, was represented. The official enquiry has not yet been held.

## REHOUSING.

On the 1st January, 1939, the position was as shown in the following Tables :—

### HOUSES REQUIRED.

Area.	No. of Houses Required.	Remarks.
Nos. 1—3 .. .. .	225	All rehoused
Nos. 4—7 .. .. .	85	do.
Nos. 8 & 11—15 .. .. .	169	do.
Nos. 9, 10, 17, 18 & 19	239	Rehousing in progress
Nos. 20—33 .. .. .	413	do.
Nos. 34—42 .. .. .	237	do.
Nos. 43—47 .. .. .	62	do.
Nos. 48 & 49 .. .. .	24	do.
Nos. 50 & 51 .. .. .	19	do.
Nos. 52—54 .. .. .	405	do.
Nos. 55—79 .. .. .	594	do.
Nos. 80—82 .. .. .	211	do.
Nos. 83—88 .. .. .	334	
Nos. 89—98 .. .. .	268	
Nos. 99—109 .. .. .	1223	
Individual Unfit Houses	407	259 rehoused
Total .. .. .	4,915	

## HOUSES AVAILABLE.

New Estate.	Houses Available or being built.	Houses Occupied.	Remarks.
Tailby .. ..	213	213	
Freake's .. ..	241	241	
Northfield No. 1 ..	70	70	
Northfield No. 2 ..	200	200	
Braunstone .. ..	240	240	
Northfield No. 3 ..	307	307	
New Parks .. ..	—	—	Land bought. Roads constructed for 1,000 houses.
Braunstone .. ..	350	350	
Braunstone .. ..	274	255	
Braunstone .. ..	400	382	
Braunstone .. ..	378	107	
Braunstone .. ..	134	—	Contract let.
Northfield .. ..	16	—	Contract let.
Totals .. ..	2,823	2,365	

## HOUSING ACT, 1936 (OVERCROWDING).

Number of overcrowded families requiring alternative accommodation on January 1st, 1938 .. .. . 260

(a) (i) Number of dwellings overcrowded at the end of the year .. .. . 135

(ii) „ families dwelling therein .. .. . 135

(iii) „ persons dwelling therein .. .. . 991

(b) „ new cases of overcrowding during the year .. .. . 116

(c) (i) „ cases of overcrowding relieved during the year .. .. . 241

(ii) „ persons concerned in such cases .. . 1642

(d) Nil.

Included in the overcrowded families dealt with during the year is a number of families which were living in houses scheduled for Slum Clearance procedure, and found to be overcrowded in the 1936 census. On the removal of the Housing Subsidy it was found possible to re-house these families earlier than was expected.

## ABATEMENT OF OVERCROWDING.

Number of overcrowded families at 31st December, 1937	260
„        new cases of overcrowding during the year	116
	<hr/>
Total number of overcrowded houses    ..    ..    ..	376
 <i>Less 1. Privately owned houses where overcrowding has been abated by :—</i>	
(a) Corporation re-housing    ..    ..    ..	127
(b) Tenant obtaining house elsewhere    ..	47
(c) Reduction in family (marriage, etc.)    ..	45
 <i>Less 2. Corporation houses where overcrowding has been abated by :—</i>	
(a) Exchange of houses or re-distribution    ..	22
(b) Tenant obtaining house elsewhere    ..	—
(c) Reduction in family (marriage, etc.)    ..	—
	<hr/> 241
	<hr/>
	135
	<hr/>
Number of families where overcrowding has been abated	241
„        „        overcrowded at the end of the year	135

TABLE 14.  
**HOUSING STATISTICS**

For year ended 31st December, 1938.

**1.—Unfit Dwelling Houses—Inspection.**

(1) (a) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) .. ..	9234
(b) Number of inspections made for the purpose .. ..	15863
(2) (a) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 .. ..	2872
(b) Number of inspections made for the purpose .. ..	3757
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ..	1969
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-heading) found to be not in all respects reasonably fit for human habitation .. .. .	1691

**2.—Remedy of Defects without Service of Formal Notices.**

Number of defective dwelling houses rendered fit in consequence of informal action by Local Authority or their officers	810
---	-----

**3.—Action under Statutory Powers.**

*A—Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :*

(1) Number of dwelling houses in respect of which notices were served requiring repairs .. .. .	5
(2) Number of dwelling houses which were rendered fit after service of formal notices :	
(a) By owners .. .. .	2
(b) By Local Authority in default of owners .. ..	Nil.

*B—Proceedings under Public Health Acts :*

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied .. ..	1974
(2) Number of dwelling houses in which defects were remedied after service of formal notices :	
(a) By owners .. .. .	57
(b) By Local Authority in default of owners .. ..	Nil.

*C—Proceedings under Sections 11 and 13 of the Housing Act, 1936 :*

(1) Number of dwelling houses in respect of which Demolition Orders were made .. .. .	12
(2) Number of dwelling houses demolished in pursuance of Demolition Orders .. .. .	31

*D—Proceedings under Section 12 of the Housing Act, 1936 :*

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made .. ..	Nil.
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit .. ..	Nil.





## SECTION E.

---

# Inspection and Supervision of Food

Details of matters in this section will be found in the reports of the Public Analyst and Chief Sanitary Inspector, pages 193 and 227.



# Report on the Tuberculosis Dispensary for 1938

By

WYVILLE S. THOMSON, M.D., D.P.H., Edin.,  
Tuberculosis Medical Officer,

with foreword by the Medical Officer of Health.



## COMMENT BY THE MEDICAL OFFICER OF HEALTH.

In the early days of Public Health Administration in this country, it was realised that in tuberculosis there was a disease that merited every effort put forth towards its eradication, and the seed was laid of a service that is now really beginning to bring forth fruit.

A perusal of Dr. Thomson's report for 1938 substantiates this latter statement.

I will only comment on one or two facts.

(1) The total number of cases on the register has again been reduced by about 100. In the natural course of events, if this rate of reduction is continued, in twenty years' time there will be practically no pulmonary or lung tuberculosis. But it is possible that this state of affairs may come about even earlier.

Every case of pulmonary tuberculosis is contracted from a previous case.

The fewer total cases there are, the less risk of new fresh cases, and so the rate of reduction in the total number of cases should show an accelerating drop.

(2) The number of new cases in 1938 is a low record. This, however, is only true as far as pulmonary tuberculosis is concerned. The position is not so satisfactory as regards non-pulmonary cases. These are infected, as to about 50 per cent. of the cases, by tuberculous milk. It cannot be too strongly urged that efficient pasteurisation of milk is an essential if the incidence of non-pulmonary tuberculosis is to be checked.

(3) It is particularly pleasing to note the great reduction in the number of new cases of pulmonary tuberculosis arising in adolescents. In the three year period, 1936, 1937 and 1938, 25 per cent. less new cases were notified than in the three year period, 1933, 1934, and 1935.

(4) The death-rate for the City is the lowest on record and also shows the greatest drop in any one year. Individual years, however, do not show all the picture. One year may be good, the next not so good. But the general trend of the disease is markedly satisfactory.

# Report on the Tuberculosis Dispensary for 1938

by

WYVILLE S. THOMSON, M.D., D.P.H., Edin.,  
Tuberculosis Medical Officer.

---

## Premises.

The Tuberculosis Dispensary, situated at 59, Regent Road, is the Centre for dealing with Tuberculosis in the City.

## Staff.

The Medical Staff consists of one full-time and one part-time Medical Officer, three fully-trained Nurses (each of whom is responsible for visitation over one-third of the City), a senior and a junior clerk.

## Number of Cases of Tuberculosis in the City.

There were on 31st December, 1938, 2,010 cases of Tuberculosis on the Notification Register, made up as follows :—

PULMONARY.		NON-PULMONARY.		TOTAL CASES
Males	Females	Males	Females	
788	829	214	179	2,010

## New Cases Notified during 1938.

During the past year there were 394 new cases of Tuberculosis notified, of which 310 were Pulmonary and 84 Non-pulmonary. The corresponding figures for 1937 were 345 Pulmonary and 88 Non-pulmonary. The Pulmonary Notifications have therefore shown a

decrease of 35 and the Non-pulmonary of 4,—a total reduction of 39, equivalent to 9 per cent.

The following table gives the number of new cases since 1918 :—

1918	....	Pulmonary, 746 ; Non-pulmonary, 82 ; Total, 828			
1919	....	„	658 ;	„	47 ; „ 705
1920	....	„	572 ;	„	59 ; „ 631
1921	....	„	497 ;	„	105 ; „ 602
1922	....	„	566 ;	„	43 ; „ 609
1923	....	„	692 ;	„	71 ; „ 763
1924	....	„	725 ;	„	65 ; „ 790
1925	....	„	606 ;	„	77 ; „ 683
1926	....	„	650 ;	„	77 ; „ 727
1927	....	„	700 ;	„	80 ; „ 780
1928	....	„	668 ;	„	117 ; „ 785
1929	....	„	657 ;	„	77 ; „ 734
1930	....	„	582 ;	„	66 ; „ 648
1931	....	„	511 ;	„	61 ; „ 572
1932	....	„	442 ;	„	69 ; „ 511
1933	....	„	438 ;	„	74 ; „ 512
1934	....	„	331 ;	„	72 ; „ 403
*1935	...	„	460 ;	„	100 ; „ 560
1936	....	„	355 ;	„	79 ; „ 434
1937	....	„	345 ;	„	88 ; „ 433
1938	....	„	310 ;	„	84 ; „ 394

A casual glance at these figures shows—in spite of the fact that we are dealing with a larger population—that there is a steady decline in the number of new cases of Tuberculosis. The year just ended constitutes a low record. Less than half as many new cases were notified as in 1918. The Pulmonary cases (i.e. the infectious variety) have in fact been reduced by more than half since 1929.

Unfortunately, one cannot say that the non-pulmonary are diminishing to any extent. Many of these cases are of bovine origin—due to

---

\*City Boundary extended and population increased by about 20,000. The figure given for 1935 included 139 pulmonary and 23 non-pulmonary taken over from the County.



milk from tuberculous cows. The figures here recorded constitute a strong argument in favour of compulsory pasteurisation of all milk entering the City.

Of the 394 notifications during the year, 155 of the pulmonary and 27 of the Non-pulmonary were notified by the Tuberculosis Officer, and a point of interest is that 85% of all the Pulmonary cases had either been examined by the Tuberculosis Officers, or had had their sputum examined and reported on previous to notification.

The following table gives the Sex and Age periods of those notified during 1938 :—

Age Periods	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 & up.	Total
Pulmonary												
Males ..	1	1	4	7	20	17	38	21	31	23	6	169
Females ..	—	3	3	5	20	21	36	19	19	11	4	141
Non-pulmonary												
Males ..	2	6	9	4	2	3	1	3	5	5	1	41
Females ..	1	5	6	2	7	3	5	6	5	2	1	43

**New Cases in Children (0-14 inclusive)**

From the above table it will be seen that 24 children (13 males and 11 females) under 15 years of age have been notified during the year as suffering form Pulmonary Tuberculosis, and 35 (21 males and 14 females) from Non-pulmonary disease. These figures show a considerable decrease when compared with 1937, in which year 48 pulmonary (29 males and 19 females) and 40 non-pulmonary (24 males and 16 females) were notified.

Another point of importance is that only three of these pulmonary cases in children in 1938 showed the presence of Tubercle Bacilli as compared with eight in 1937.

**New Adolescent Cases (15-24 inclusive).**

In previous annual reports, attention has been drawn to the decline in the number of young adults notified as suffering from Pulmonary Tuberculosis. Unfortunately, this reduction has not been maintained during the past year, two more having been notified than during the preceding year. Nine fewer were notified during the age period 15-19, but eleven more during the age period 20-24. The total (78) is, with the exception of 1937, the lowest number recorded, as will be seen from the following table :—



Ages.	Pulmonary Tuberculosis in Young Adults (Notifications) (15-24) during the past 6 years											
	1933		1934		1935		1936		1937		1938	
	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24
Males ..	22	31	18	26	18	24	18	27	21	9	20	17
Females..	34	40	19	27	21	36	15	25	28	18	20	21
Total ..	56	71	37	53	39	60	33	52	49	27	40	38
Total both sexes	127		90		99		85		76		78	
Three year period ..	316						239					

Study of this table reveals the fact that in 1938 in the age period 15-19 the number of males and females notified is equal—twenty of each. For the age period of 20-24, four more females have been notified than males. Except in 1936, the number of adolescent females notified has always exceeded the males. It is interesting to note that during the three years 1933-4-5, 316 adolescent cases were notified, but for the three years 1936-7-8, only 239 were notified—a reduction equivalent to about 25 per cent. for the three-year period.

The steady decline in the number of new adolescent cases notified is very satisfactory as these cases are generally acute, and unless promptly dealt with are likely to proceed to a rapidly fatal termination. They constitute the ideal cases for Collapse Therapy by means of Artificial Pneumothorax. Prolonged institutional treatment is generally necessary—twelve months or more usually being required—and after discharge they continue to attend Sanatorium as out-patients for “re-fills” to maintain collapse of the lung for at least another twelve months. Practically all of these patients are, on admission to Sanatorium, in an infectious condition, but it has been found that by this method of treatment the majority are discharged in a non-infective condition and their prospects of permanent recovery are enormously increased.

### Deaths.

(Note.—In the following paragraphs the figures for 1938 for deaths are those allocated locally, which differ somewhat from those given by the Registrar-General (see page 14).

The total number of deaths from Tuberculosis for the year 1938 was 195 of which 174 were due to pulmonary and 21 to non-pulmonary disease.

The total for 1937 numbered 251, of which 216 were due to pulmonary and 35 to non-pulmonary disease.

There has, therefore, been a total reduction of 56, of which 42 were pulmonary and 14 non-pulmonary. This is equivalent to a reduction of 19 per cent. in the pulmonary and 40 per cent. in the Non-pulmonary and a total reduction of 22 per cent. as compared with 1937.

Never before has there been such a large reduction in any one year.

The total death-rate per 100,000 has fallen from 95 to 74, the pulmonary having dropped from 82 to 66, and the non-pulmonary from 13 to 8.

Of the total deaths 61 died in the City General Hospital, 27 in the Groby Road Sanatorium, 14 in other institutions and 93 in their own homes.

As in previous years it has been customary to advise removal of hopeless and dying cases to hospital, not only for the skilled attention they receive, but in order to lessen the strain and danger of infection to relatives. Unfortunately, owing to shortage of accommodation, it has not been possible to remove as many of these as we have wished. When the Sanatorium extensions are completed in 1939 it should be possible to allow more of these cases to spend their last months in hospital.

The following table gives the number of deaths and death-rates from Tuberculosis since 1904.

**TABLE 15.**  
**Number of Deaths from Tubercular Diseases**  
**in Leicester in past years.**

Year.	Phthisis.		Other Tuberculous Diseases.		Total Tuberculous Deaths.	
	Deaths.	Rate per 100,000 Population.	Deaths.	Rate per 100,000 Population.	Deaths.	Rate per 100,000 Population.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1904	353	163	96	44	449	207
1905	288	132	87	40	375	171
1906	339	154	71	32	410	187
1907	275	124	99	44	374	169
1908	287	128	104	46	391	175
1909	290	129	82	36	372	166
1910	281	124	77	34	358	158
1911	288	126	66	28	354	155
1912	284	123	89	38	373	162
1913	301	130	82	35	383	165
1914	273	117	88	37	361	155
1915	325	143	76	33	401	177
1916	306	135	67	29	373	165
1917	343	157	78	35	421	193
1918	316	145	82	37	398	182
1919	264	111	62	26	326	138
1920	255	107	72	30	327	138
1921	278	116	73	30	351	147
1922	294	123	67	28	361	151
1923	285	119	36	15	321	135
1924	287	120	62	25	349	146
1925	305	127	59	24	364	152
1926	282	118	43	17	325	136
1927	283	118	63	26	346	144
1928	265	110	42	17	307	128
1929	266	110	53	21	319	132
1930	227	94	44	18	271	112
1931	262	108	49	20	311	129
1932	240	100	33	14	273	113
1933	269	111	32	14	301	125
1934	223	92	19	8	242	100
1935	234	91	18	7	252	98
1936	202	77	28	11	230	88
1937	216	82	35	13	251	95
1938	174	66	21	8	195	74

It will be noticed that the death-rate is just about one-third of what it was in 1904, and has been almost halved since 1927.



The following Tables give the Age, Sex Distribution and Occupations of those dying from Pulmonary Tuberculosis during 1938 :—

TABLE 16.  
Age and Sex Distribution of Deaths from Phthisis in 1938.

Age Period.	Males.	Females.	Total.
0—1 .. ..	1	..	1
2—4 .. ..	1	..	1
5—9 .. ..	..	..	..
10—14 .. ..	..	2	2
15—19 .. ..	7	10	17
20—24 .. ..	6	9	15
25—34 .. ..	17	23	40
35—44 .. ..	16	11	27
45—54 .. ..	16	12	28
55—64 .. ..	19	11	30
65 and upwards ..	11	2	13
All ages ..	94	80	174

Occupations of Persons Dying from Phthisis in 1938.

	M.	F.		M.	F.
SHOE TRADE :					
Finishers .. ..	8	..	Army Pensioners .. ..	1	..
Clickers .. ..	2	..	Boxmakers .. ..	1	1
Rivetters .. ..	..	..	Porters .. ..	2	..
Pressmen .. ..	4	..	Licensed Victuallers .. ..	2	..
Machinists .. ..	2	3	Shop Assistants .. ..	7	1
Various .. ..	7	2	Warehousemen .. ..	3	..
			Various .. ..	22	3
Total in Shoes ..	23	5	Occupations not stated		
			(includes Married		
*Hosiery Trades.. ..	8	4	Women, Widows,		
Labourers .. ..	6	..	Children and Per-		
Clerks .. ..	3	3	sons of no occupa-		
Tailoring Trade ..	2	1	tion) .. ..	3	62
Vanmen .. ..	3	..			
Soldiers .. ..	..	..	Grand Total ..	94	80
Engineers .. ..	7	..			
Painters .. ..	1	..			
Dressmakers .. ..	..	..			

\* A large number of *married* women are engaged in the Hosiery Trade, but these are not included, for in the case of deaths of married women and widows, only the husband's occupation is registered.



Analysis of Deaths.

An analysis of the pulmonary deaths which occurred during 1938 shows, in the first portion of the following tables those who had had institutional treatment, the stage of the disease when first examined and the length of time elapsing between notification and death. In the second portion of the table similar information is given about those who had not had institutional treatment. In the third portion details are given of those who were never examined at the Dispensary—chiefly patients in other institutions, e.g., Mental Hospital, Royal Infirmary, etc. Included here are also those patients who did not desire examination at the Dispensary, only eight in all.

ANALYSIS OF DEATHS.

PULMONARY CASES HAVING HAD INSTITUTIONAL TREATMENT.										
Stage when first examined	Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over	
T.B. - ve cases 12 .. ..	3	1	—	—	3	—	—	—	5	
T.B. + ve Stage I. 24 ..	—	—	—	1	1	2	3	2	15	
T.B. + ve Stage II. 75 ..	3	3	4	12	11	7	11	11	13	
T.B. + ve Stage III. 31 ..	9	7	5	4	2	—	3	—	1	
Total 142 .. ..	15	11	9	17	17	9	17	13	34	

Of the total 142 recorded in this table 22 were treated at both Groby Road Sanatorium and the City General Hospital, 52 were treated at Groby Road Sanatorium only and 68 at the City General Hospital only.

PULMONARY CASES NOT HAVING HAD INSTITUTIONAL TREATMENT.												
Stage when first examined				Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
T.B. - ve cases.	3	..	..	1	—	—	—	—	1	—	—	1
T.B. + ve	Stage I.	2	..	—	—	—	—	—	—	—	—	2
T.B. + ve	Stage II.	6	..	—	—	—	2	1	—	2	—	1
T.B. + ve	Stage III.	5	..	3	—	—	—	—	1	1	—	—
Total	16	..	..	4	—	—	2	1	2	3	—	4

PULMONARY CASES NOT EXAMINED AT OR IN CONNECTION WITH THE DISPENSARY.

TOTAL	Died within one month of notification	Within two months	Within three months	Within six months	Within twelve months	Within 18 months	Within two years	Within three years	Lived three years or over
8	5	—	—	—	1	—	1	—	1

These tables account for 166 deaths. In addition there were eight deaths of patients who had never been notified as suffering from Tuberculosis. This gives the total of 174 Pulmonary deaths.

**Deaths from Pulmonary Tuberculosis in Children (0-14) during the past six years.**

As has been stated in previous reports, the total number of deaths of children under 15 years of age from Pulmonary Tuberculosis is low. During 1938 four children died, this figure being the same as in 1937. From the following table it will be seen that during the years 1933-4-5 twenty-six deaths occurred, and during the three years 1936-7-8, there were only nine deaths—a fall of over 65 per cent. in the three-year period—a very satisfactory reduction.

**Deaths from Pulmonary Tuberculosis in Children (0-14)**  
**During the past six years.**

	1933			1934			1935			1936			1937			1938		
Ages.	—4	—9	—14	—4	—9	—14	—4	—9	—14	—4	—9	—14	—4	—9	—14	—4	—9	—14
Males	2	—	2	2	—	—	1	1	1	—	—	—	1	—	2	2	—	—
Females	3	1	4	2	2	—	4	—	1	1	—	—	—	—	1	—	—	2
Total	5	1	6	4	2	—	5	1	2	1	—	—	1	—	3	2	—	2
Total each year	12			6			8			1			4			4		
Three year period ..	26									9								

The Children's Sanatorium at Anstey Lane has been in full use for the treatment of Pulmonary Trouble in children and they have undoubtedly benefitted to a great extent by a period of treatment at this institution.

**Deaths from Pulmonary Tuberculosis in Young Adults (15-24)**  
**during the past six years.**

Attention has been drawn in previous years to the reduction in the number of deaths of young adults, and thanks largely to treatment by means of Artificial Pneumothorax, the fall in the number of deaths has been more marked than the fall in notifications. (See page 62).

During the past year there were 32 deaths of young adults, one less than in 1937. Study of the following table, however, reveals the fact that during the three years 1933-4-5, there were 155 deaths and for the three years 1936-7-8, this figure had fallen to 96—a reduction of 38 per cent. for the three-year period.

**Deaths from Pulmonary Tuberculosis in Young Adults (15-24) during**  
**the past six years.**

Ages.	1933		1934		1935		1936		1937		1938	
	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24
Males ..	7	14	5	15	5	10	3	6	3	12	7	6
Females ..	16	24	9	21	17	12	4	18	7	11	10	9
Total	23	38	14	36	22	22	7	24	10	23	17	15
Total	61		50		44		31		33		32	
Three year period ..	155						96					



**Non-Pulmonary Deaths.**

It may be remembered that in 1937 there was a considerable increase in deaths from Non-pulmonary Tuberculosis, when 35 were recorded. The figure for the year just ended is 21—a reduction of 40 per cent. With the exception of 1935 when there were 18, and 1934 when there were 19 Non-pulmonary deaths, this is the lowest figure for deaths from Non-pulmonary Tuberculosis.

The following table gives the site of the disease of those dying from Non-pulmonary Tuberculosis :—

Bones & Joints	Kidney & Bladder	Abdominal	Meninges	Miliary
1	3	2	9	6

In 1937, six died from Bone and Joint Tuberculosis, five from Kidney and seven from Abdominal Tuberculosis. There has again, fortunately, been a relatively small number dying from acute forms of Tuberculosis, Meningitis and Miliary, nine and six respectively, as compared with nine and eight in 1937.

Of the total 21 Non-pulmonary deaths, 10 are known to have been in contact with one or more persons suffering from Pulmonary Tuberculosis and as usual rather more than half (13 out of 21) were children under 15 years of age.

In children under 15 years of age Tuberculous Meningitis has always been responsible for the largest number of deaths, and the following table has been drawn up to show the number of deaths from this variety during the past six years :—

Deaths from Tuberculous Meningitis in Children (0-14) during the past six years						
	1933	1934	1935	1936	1937	1938
Males .. ..	9	5	4	9	3	6
Females .. ..	6	4	5	2	4	3
Total .. ..	15	9	9	11	7	9
Three-year period .. ..	33			27		



In 1937, there were seven deaths, the lowest figure recorded, two more occurred during 1938. In the three-year period 1933-4-5, there were 33 deaths and in the three years 1936-7-8, there were 27 deaths, a reduction in the three-year period of 19 per cent.

### **Recovered Cases.**

During the past year it has been possible to remove the names of 146 patients from the register as having "recovered." Of these 126 were Pulmonary and 20 were Non-pulmonary. The Pulmonary cases had remained free from signs of active disease for not less than five years. On discharge 120 were adults (of whom 39 had at one time had Tubercle Bacilli in the sputum) and six were children.

All of the 20 Non-pulmonary cases had remained free from active trouble for not less than three years. In one case the trouble was in the Bones and Joints and he had received treatment from Mr. Morris (the Orthopaedic Surgeon.) In four cases the disease was in the abdominal organs, and in 15 cases in the peripheral glands.

It is interesting to note that of the 1,917 patients discharged as "recovered" during the past eight years only 39—about two per cent.—have broken down and been taken on again with signs of active disease.

The table on page 71, made out for the Ministry of Health, gives an analysis of those patients whose names were on the Dispensary Register during 1938.

The tables on pages 72-75, also made out for the Ministry of Health from information contained in the Register for the year 1938, and containing information as to the condition of patients previous to 1928, and for each subsequent year, should prove of considerable interest.

# ANALYSIS OF CASES ON DISPENSARY REGISTER.

DIAGNOSIS	Pulmonary				Non-Pulmonary				Total				Gr'd T'ls.
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A. New Cases examined during the year excluding contacts:— (a) Definitely Tuberculous .. (b) Diagnosis not completed .. (c) Non - Tuberculous .. ..	125	96	5	12	14	24	13	10	139	120	18	22	299
	—	—	—	—	—	—	—	—	9	3	17	12	41
	—	—	—	—	—	—	—	—	238	228	52	64	582
B. Contacts examined during the year:— (a) Definitely Tuberculous .. (b) Diagnosis not completed .. (c) Non - Tuberculous .. ..	2	8	—	2	—	—	—	—	2	8	—	2	12
	—	—	—	—	—	—	—	—	2	1	13	11	27
	—	—	—	—	—	—	—	—	81	115	120	83	399
C. Cases written off Dispensary Register:— (a) Recovered .. (b) Non - Tuberculous ..	61	59	2	4	2	6	7	5	63	65	9	9	146
	—	—	—	—	—	—	—	—	345	365	193	166	1069
D. Number of Cases on Dispensary Register on December 31st : (a) Definitely Tuberculous .. (b) Diagnosis not completed ..	657	557	43	48	99	98	87	58	756	655	130	106	1647
	—	—	—	—	—	—	—	—	13	6	35	25	79
1. Number of cases on Dispensary Register on January 1st .. .. .				1,760				2. Number of cases transferred from other areas and cases returned after discharge .. ..				54	
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ..				74				4. Cases written off during the year as dead (all causes) .. .. .				159	
5. Number of attendances at the Dispensary ..				12,695				6. Number of Insured Persons under Domiciliary Treatment on December 31st .. .. .				212	
7. Number of consultations with medical practitioners. (a) Personal .. .. (b) Other .. ..				88 755				8. Number of visits by Tuberculosis Officers to homes of patients for the purpose of examination				567	
9. Number of visits by Nurses to homes for Dispensary purposes ..				8,156				10. Number of : (a) Specimens of sputum .. .. . (b) X-ray examinations made in connection with Dispensary work				1,548 1,321	
11. Number of "recovered" cases restored to the Dispensary Register ..				1				12. Number of "T.B. plus" cases on Dispensary Register on December 31st				790	



PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1938 of all patients remaining on the Dispensary Register and (b) the reasons for the removal of all cases written off the Register. The table is arranged according to the years in which the patients were first entered on the Dispensary Register as definite cases of Pulmonary Tuberculosis, and their classification at that time.

Condition at the time of the last record made during the year to which the return relates.		Previous to 1928.				1928.				1929.				1930.				1931.				1932.				
		Class T.B. plus.				Class T.B. plus.				Class T.B. plus.				Class T.B. plus.				Class T.B. plus.								
		T.B. Minus.	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).	T.B. Minus.	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).	T.B. Minus.	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).	T.B. Minus.	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).	T.B. Minus.	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).
Disease arrested.	Adults (M F)	15 18	14 5	4 4	1 19 9	3 4	4 7	3 -	7 2	8 5	- 2	7 2	8 1 1 -	10 7	7 16	11 6	3 3	6 12	13 3	3 2 18 6						
	Children	26	2	2	4	11	2	-	-	-	25	-	-	-	9	-	-	-	-	-	-					
	Adults (M F)	1 5	16 7	7 8	2 25 17	- 2	- 1	2 2 1	5 2	8 4	- -	5 2	10 3 2 1	11 6	- 1	7 5	3 1	- 2	10 2	6 2 18 8						
	Children	2	2	1	3	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-					
Disease not arrested.	Adults (M F)	4	4	-	4	1	-	1	-	-	-	-	-	1	1	3	1	-	1	1 - 2						
	Children	71	50	26	5	81	21	14	8	1	23	27	18	29	5	36	34	32	9	-	41	23	29	18	5	52
Discharged as recovered.	Adults (M F)	395 435	196 196	39 32	21 256 252	42 55	11 10	4 7	15 17	25 21	14 41	20 18	11 9	21 44	15 30	16 7	15 30	16 7	2 4	- 11	10 7	2 3	2 -	-	2 3	
	Children	1110	58	2	60	116	-	3	3	2	76	2	1	45	17	-	17	-	-	-	2	-	-	-	-	
Lost sight of or otherwise removed from Dispensary Register	Adults (M F)	1074	577	381	184	1142	119	27	6	2	35	92	36	26	14	41	37	18	16	1	35	28	20	18	2	40
	Children	762 703	334 141	309 153	263 266	906 560	20 18	23 23	15 25	69 59	105 63	15 14	39 20	38 17	44 20	100 50	17 12	33 26	36 33	8 15	77 74	7 15	23 19	44 29	20 15	87 63
Dead.	Adults (M F)	227	111	22	73	206	4	-	-	1	1	6	2	-	-	-	3	1	2	-	3	3	1	-	2	3
	Children	4706	1613	938	831	3382	374	94	76	29	199	258	137	102	81	215	131	101	93	24	218	72	68	91	39	198
Total written off Dispensary Register .. ..		4777	1600	904	390	2400	307	100	64	20	300	307	157	101	20	301	304	100	100	34	350	307	307	100	44	350



PULMONARY TUBERCULOSIS—CONTINUED FROM PREVIOUS PAGE.

Condition at the time of the last record made during the year to which the return relates.		1933.				1934.				1935.				1936.				1937.				1938.									
		Class T.B. plus.				Class T.B. plus.				Class T.B. plus.				Class T.B. plus.				Class T.B. plus.				Class T.B. plus.									
		T.B. minus.				T.B. minus.				T.B. minus.				T.B. minus.				T.B. minus.				T.B. minus.									
		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus.)	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus.)	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus.)	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus.)	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus.)	Group 1.	Group 2.	Group 3.	Total (Class T.B. plus.)						
Disease arrested.	M	6	15	4	19	18	7	6	13	14	5	2	7	2	1	1	1	—	—	—	—	—	—	—	—						
	F	4	14	4	19	13	5	5	10	10	2	5	5	5	1	2	—	—	—	—	—	—	—	—	—						
	Children	4	—	—	—	7	—	—	—	8	—	—	—	2	1	—	1	—	—	—	—	—	—	—	—						
	Adults {	1	4	3	8	—	12	14	1	27	2	11	15	3	7	27	6	63	23	21	39	1	18	40	8	66					
Disease not arrested.	M	1	9	6	16	2	4	15	19	8	9	10	1	9	16	—	36	30	15	36	1	11	24	5	40						
	F	1	9	6	16	2	4	15	19	8	9	10	1	9	16	—	36	30	15	36	1	11	24	5	40						
	Children	—	1	1	2	1	2	—	2	—	—	—	—	5	—	2	2	39	1	2	—	1	1	—	2						
	Adults {	—	2	2	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—						
Total on Dispensary Register on Dec. 31st .. ..	..	16	45	20	3	68	42	30	40	1	71	42	27	30	5	62	30	44	55	6	105	92	37	77	2	116	88	30	65	13	108
	Adults {	3	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	F	2	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Children	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Lost sight of or otherwise re-moved from Dispensary Register	..	19	10	11	—	21	5	4	10	4	18	8	9	2	1	12	3	7	6	1	14	18	1	1	—	2	3	1	—	—	1
	Adults {	4	21	50	33	104	8	15	47	27	89	10	8	33	19	60	9	3	49	14	66	2	5	29	11	45	5	1	10	9	20
	F	14	11	47	30	88	7	6	20	5	31	9	10	27	9	46	2	7	24	18	49	4	3	18	7	28	1	1	19	2	22
	Children	2	—	—	1	1	—	—	—	—	—	—	1	1	—	1	—	2	—	—	—	1	—	3	—	3	1	—	1	—	—
Total written off Dispensary Register .. ..	..	44	44	108	64	216	20	25	77	36	138	28	28	62	29	119	16	17	79	33	129	25	9	51	18	78	10	3	30	11	44
	Adults {	44	44	108	64	216	20	25	77	36	138	28	28	62	29	119	16	17	79	33	129	25	9	51	18	78	10	3	30	11	44
	F	44	44	108	64	216	20	25	77	36	138	28	28	62	29	119	16	17	79	33	129	25	9	51	18	78	10	3	30	11	44
	Children	60	89	128	67	284	62	55	117	37	209	70	55	92	34	181	46	61	134	39	234	117	46	128	20	194	98	33	95	24	152
GRAND TOTALS .. ..		60	89	128	67	284	62	55	117	37	209	70	55	92	34	181	46	61	134	39	234	117	46	128	20	194	98	33	95	24	152



NON-PULMONARY TUBERCULOSIS.

Condition at the time of the last record made during the year to which the return relates.	Previous to 1928.					1928.					1929.					1930.					1931.					1932.					
	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	
(a) Remaining on Dispensary Register on December 31st.	Adults (M F)	2 1	- -	- 1	2 2	1 3	- -	- -	- -	1 3	2 -	- -	- -	- -	2 -	1 2	1 -	1 -	- -	- -	2 1	1 1	- -	- -	- -	1 1	1 -	- -	- -	- -	1 1
	Children	7	1	1	10	2	1	1	-	-	-	-	-	-	-	5	-	-	-	1	6	4	-	-	-	-	-	-	-	2	7
	Adults (M F)	- 1	- -	4 2	4 3	- 1	- -	- 1	- -	- 1	- -	- 1	- -	- -	- -	- -	- -	- 1	- -	- -	- -	- 1	- -	- -	- -	- 1	- -	- -	- -	- -	1 3
	Children	3	-	3	-	6	-	-	1	-	1	5	-	-	-	1	1	1	-	-	1	1	-	-	-	-	-	-	-	-	3
Condition not ascertained during the year .. ..	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Total on Dispensary Register on Dec. 31st .. ..	14	1	10	2	27	6	1	2	-	9	8	-	-	-	2	10	9	-	-	1	10	8	1	2	-	11	11	-	3	17	
Transferred to Pulmonary .. ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Discharged as recovered.	Adults (M F)	12 33	3 5	5 4	8 16	28 58	3 2	1 6	1 1	5 10	- -	- -	- -	4 1	4 2	3 3	1 3	1 2	- -	2 3	7 5	3 2	2 1	- -	9 2	2 -	- 1	- -	- -	2 1	
	Children	41	20	15	31	107	6	3	-	7	16	1	4	-	4	9	4	2	-	5	11	1	3	1	2	7	1	1	-	5	7
Lost sight of or otherwise removed from Register .. ..	28	16	35	53	132	9	3	2	6	20	8	3	2	7	20	2	2	1	2	7	7	7	2	-	11	8	3	2	2	15	
Dead.	Adults (M F)	54 69	24 75	28 11	4 4	110 159	2 2	1 3	1 1	5 6	3 -	1 1	1 1	- -	5 2	- -	- -	1 3	- -	1 -	3 3	2 2	2 -	- 1	4 3	1 -	- 1	- -	- -	2 1	
	Children	86	70	18	4	178	1	1	-	-	2	1	2	-	3	2	2	1	-	1	4	1	1	2	-	3	1	2	-	2	5
Total written off Dispensary Register .. ..	323	213	116	120	772	25	18	4	17	64	13	12	4	16	45	14	10	5	11	40	18	11	2	8	39	13	8	3	9	33	
GRAND TOTALS .. ..	337	214	126	122	799	31	19	6	17	73	21	12	4	18	55	23	10	5	12	50	26	12	4	8	50	24	8	6	12	50	
(b) Not now on Dispensary Register and reasons for removal therefrom.																															
GRAND TOTALS .. .. (excluding those transferred to Pulmonary)																															

Condition at the time of the last record made during the year to which the return relates.	1933.					1934.					1935.					1936.					1937.					1938.				
	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal	Other Organs	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs	Peripheral Glands.	Total.					
(a) Remaining on Dispensary Register on December 31st.	Adults (M F)	2 4	— —	3 1 1	6 6	2 2	— —	4 —	1 1	7 3	7 7	11 11	6 6	1 2	5 5	3 3	2 1	1 1	— —	3 3	3 3	3 3	2 2	— —	2 2	7 7				
	Children	9	1	2	12	7	4	1	7	19	11	6	1	5	23	10	5	1	2	18	2	5	1	5	13	2				
	Adults (M F)	— —	— —	— —	— —	1 2	— —	1 1	— —	2 3	1 1	1 1	1 1	— —	3 3	3 3	— —	— —	— —	3 3	4 2	2 2	— —	— —	6 6	12 22				
	Children	1	—	—	2 3	3 3	3	—	—	—	4	4	—	—	7	45	24	7	3	5	39	23	11	8	9	51	21 59			
Total on Dispensary Register on December 31st .. ..	16	1	6	4	27	17	4	7	9	37	22	10	6	7	45	24	7	3	5	39	23	11	8	9	51	21 59				
Transferred to Pulmonary ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
(b) Not now on Dispensary Register and reasons for removal therefrom.	Adults (M F)	— —	— —	— 2	— 2	— —	— —	— —	— 3	— 3	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —				
	Children	—	1	—	5 6	1	2	—	4	7	—	—	—	—	3	3	—	—	—	—	—	—	—	—	—	—				
	Lost sight of or otherwise removed from Dispensary Register	4	5	1	3 13	1	1	2	3	7	—	1	4	3	8	1	4	2	1	8	1	—	1	—	—	3				
	Dead.	1	—	—	1 —	— 1	— —	— 1	— —	— 2	— 2	2 2	— —	— —	3 2	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	1 1			
Total written off Dispensary Register .. ..	Adults (M F)	— —	— —	— —	— 2	— —	— —	— —	— —	— 1	— —	— —	— —	— —	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —				
	Children	1	—	1	2	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
GRAND TOTALS .. .. (excluding those transferred to Pulmonary)	Adults (M F)	6	6	2	10 24	3	3	3	10 19	19 56	5	2	4	7 18	2 6	2 13	5 50	1 11	2 8	1 1	2 22	3 1	— 1	— —	— —	2				
	Children	22	7	8	14 51	20	7	10	19 56	27 12	10 63	27 12	10 63	26 13	5 50	6 50	11 59	2 25	3 14	9 11	22 59	7 21	— 11	— —	61					



## Tuberculosis Dispensary as the “Centre for Diagnosis”

The Tuberculosis Dispensary continues to hold its place as the “Centre for Diagnosis,” and doctors have no hesitation in sending patients whenever they have any doubts as to the presence or absence of Tuberculosis. Notes from 98 different doctors requesting an opinion on 755 cases were received and dealt with during the past twelve months. In addition, many patients, not under medical attention, called on their own initiative desiring to know whether they had consumption.

### Clinical Examinations.

Altogether 4,560 clinical examinations were made as compared with 4,406 the previous year. Particulars are as follow :—

	<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>
First examinations ..	418	415	365	1,198
Re-examinations ..	1,277	1,239	846	3,362
	—	—	—	—
Totals	1,695	1,654	1,211	4,560
	—	—	—	—

### “Contact” Examinations.

The examination and re-examination of those who have been in contact with a case of Tuberculosis is still carried out as in previous years and forms an important part of the work of the Dispensary.

As the number of new cases notified during the year has fallen considerably, the number of Contacts has been correspondingly reduced.

In 1937, 524 first examinations of Contacts were made but for the year 1938 the primary examinations of Contacts fell to 438. Of these 12 were found to be definitely tuberculous and 27 are still regarded as being suspicious and are being kept under careful supervision.

Parents are generally willing to be examined along with their young children but difficulty is still experienced in getting young adults to submit to examination.

Many of the children living in contact with an infective parent show signs of having been infected (primary infection) without having actually developed signs of the disease. Some of them are sent to Anstey Lane Sanatorium where a period of treatment greatly improves their general condition and reduces the possibility of their developing active disease. Repeated examination of all these cases is carried out over a number of years

**Bacteriological Examinations.**

There has been a reduction in the number of specimens of sputum sent by doctors in the City for bacteriological examination for the tubercle bacillus (402 as compared with 511 in 1937), but the number of specimens taken from patients attending the Dispensary has increased from 1,165 to 1,196, the total bacteriological examinations numbering 1,598.

The following table gives the results of examinations :—

Nature of Specimen	Positive	Negative	Total
Specimens of Sputum :—			
From Practitioners      ..      ..	62	340	402
From Patients examined at the Dispensary      ..      ..      ..	461	730	1,191
Specimens other than sputum      ..	—	5	5
Total      ..	523	1,075	1,598

**Radiological Examinations**

As in previous years all radiological examinations have been made at the Groby Road Sanatorium, to which during the past year 1,321 patients were sent for X-ray examination. Owing to the reduction in the number of new cases and contacts this number, as one would expect, is less than in 1937 when 1,445 radiological examinations were made. A final X-ray examination is always made before removing a patient's name from the Register.

**Patients Passed for Sanatorium Treatment.**

The Medical Superintendent of the Sanatorium (Dr. Mackenzie) attends the Dispensary each Monday afternoon and in conjunction with the Tuberculosis Officer selects from those patients examined during the previous week, cases considered most suitable for Sanatorium treatment. Throughout the year there has been serious shortage of accommodation for male patients and it has not been possible to admit even urgent cases without considerable delay. It is hoped that this unsatisfactory state of affairs will be rectified during the present year, after the Sanatorium extensions are completed.

The number of patients passed for treatment at Groby Road Sanatorium was 338, of whom 229 were adults and 109 children, all being pulmonary cases. This is a slight increase on the 1937 figure



when 327 were passed for a course of Sanatorium treatment. All Non-pulmonary cases are now treated at the City General Hospital.

The Children's Sanatorium at Anstey Lane has been in full use throughout the year, for those children of infective parents who had symptoms of chest trouble and who showed radiological evidence of having been infected with Tuberculosis, though only a proportion of them were actually suffering from the disease. Ninety-six children (included in the above figures) received a course of institutional treatment, and all of them showed marked improvement in their general condition by the time of their being discharged.

### **Patients passed for Treatment at the City General Hospital.**

During the past year 187 patients were recommended for treatment at the City General Hospital as compared with 209 in 1937. One hundred and forty-two were Pulmonary cases and 43 Non-pulmonary. All Non-pulmonary cases are now treated at the City General Hospital and those suffering from Bone and Joint disease are sent to the Orthopaedic Wards under the care of Mr. Morris. Many of the Pulmonary cases were acutely ill and required immediate attention, others were advanced or dying cases who could not be properly attended to at home.

Throughout the year there has been a waiting list of male patients for this institution too, and even urgent cases have had to wait for several weeks before they could be admitted. It is hoped that this difficulty will end when more beds are available at the Sanatorium.

### **Patients on Dispensary Treatment.**

During the year 164 patients received a course of treatment at the Dispensary (as compared with 147 in 1937) and at the end of the year 108 patients were in regular weekly attendance. Most of them were children who were not entitled to medical benefit under the Public Medical Service and many of them had previously had a period of treatment at Anstey Lane Sanatorium.

### **Attendances.**

The total number of attendances of patients at the Dispensary during the year was 12,695 (as compared with 12,567 in 1937) a weekly average of about 250.

### **Domiciliary Treatment.**

Those patients who are insured under the State Insurance are, after their discharge from Sanatorium or City General Hospital,

recommended for Domiciliary treatment under their panel doctors. Intimations to this effect are sent to the doctors and quarterly reports on the patients' condition are sent by them to the Tuberculosis Medical Officer. During the year 243 patients received Domiciliary treatment and at the end of the year 212 patients were receiving such treatment. Three hundred and one quarterly reports were received by the Tuberculosis Officer from the Panel Doctors.

### **Visits.**

The total visits paid by the Dispensary Nurses during 1938 numbered 8,531 which is 194 more than in 1937. Each of the Nurses is responsible for the visitation in her own district—equal to about one-third of the City. It is her duty to visit all newly-notified cases and obtain full particulars as to the home conditions, and to re-visit at regular intervals all those patients whose names are on the Notification Register.

In addition to the visits made by the Dispensary Nurses, 4,261 visits were paid by District Nurses to those bed-ridden Pulmonary and Surgical cases of Tuberculosis in need of nursing attention. Altogether 92 patients were assisted in this way at a cost of £213 1s. 0d. In 1937, 4,024 visits were paid to 75 patients, the cost being £201 4s. 0d.

The number of visits paid by the Tuberculosis Officers for the purpose of examination was 567, which is 21 more than in 1937.

### **Sleeping Shelters.**

Owing to the greatly improved housing conditions and reduction in overcrowding very few patients now have need of a sleeping shelter. During the past year only two shelters have been used by patients—one has been in use for nearly two years and one for nearly twelve months.

### **Additional Nourishment.**

Free milk—generally one pint daily—has been granted to necessitous patients whose income falls below a certain scale. During the year 94 persons were assisted in this way, at a total cost of £273 15s. 11d. At the end of the year 46 were having a daily allowance of free milk. In 1937, 101 persons received free milk at a total cost of £248 8s. 11d.

### **After-Care.**

The After-Care Committee continues to meet as previously, once a quarter, and considers reports from the Tuberculosis Officer and



each of the Dispensary Nurses. Thanks to kind friends, the Nurses have received numerous gifts of clothing which they have distributed to necessitous patients. Two patients have been supplied with dentures. A number have been referred to and received assistance from other agencies. Twenty-seven have had the use of air-rings.

Every effort is made to keep in close touch with each patient and the nurse visits at regular intervals the home of every patient as long as his name remains on the Dispensary Register. These visits are generally much appreciated and the fact that they are not neglected after leaving Sanatorium stimulates them to help themselves. Advice on many subjects is sought by patients and the nurses have been able to help and encourage them in many different ways.

### **Prevention of Tuberculosis.**

One of the important duties of the Dispensary Staff is to educate the public in the prevention of the spread of Tuberculosis and the decline in the number of Pulmonary cases shows that their efforts are not without success. Undoubtedly this decline would be accelerated if only all highly-infective cases could be retained in institutions indefinitely, but, unfortunately, institutional accommodation does not permit of this.

The necessity for the utmost care in preventing the spread of the disease is impressed on each patient. The home of each case is inspected by one of the nurses, who gives advice, both verbal and printed, in regard to sleeping accommodation, proper ventilation, disposal of sputum, etc., etc. If the home conditions are unsatisfactory she reports accordingly and sees that faults are rectified, or arrangements made for obtaining a Council house.

Numerous factors are responsible for the steady decline in Tuberculosis but, in my opinion, the most important is the greatly improved home conditions of the people. During the past ten years, we have removed over 650 families in which there were one or more cases of Tuberculosis from unsatisfactory and overcrowded houses, to good homes on the various Corporation Housing Estates where ample fresh air can be obtained. Overcrowding, which was at one time extremely prevalent, is now rarely met with and when found can be dealt with at once. Eradication of slum property is a big step towards the eradication of Tuberculosis.

WYVILLE S. THOMSON.

# Report on the Isolation Hospital and Sanatorium for the year 1938

By

J. C. HAMILTON MACKENZIE, M.D. (Glas.), D.P.H. (Lond.)  
Medical Superintendent.

With foreword by the Medical Officer of Health.



## COMMENT BY THE MEDICAL OFFICER OF HEALTH.

The work of the Isolation Hospital during 1938 is recorded in the following pages, which indicate that the year was in many respects an exceptional one. A serious epidemic of diphtheria, together with shortage of accommodation, must have been very trying for the staff.

I wish to draw attention to the following points.

(1) Apart from diphtheria no disease reached epidemic proportions throughout the year. Scarlet fever continued to be mild, although one death occurred—nowadays a rare occurrence.

(2) Though the epidemic of diphtheria was severe, the case mortality (5.8 per cent.) was not particularly so. It should be compared with that of the last year (1901) when a similar number of patients was admitted. In that year, the case mortality was 17.0 per cent.

I would like to take this opportunity of thanking the local medical profession for co-operating with us in sending suspicious cases into hospital at once, instead of waiting till the diagnosis was verified. Over one quarter of the cases admitted proved on investigation not to be diphtheria, a state of affairs that is highly satisfactory. It is much better to be safe than to be sorry afterwards.

(3) Again and again in Dr. Mackenzie's report will be found a note that certain cases of various diseases could not be admitted owing to lack of accommodation, but that with the opening of the extensions (cubicle blocks, etc.) this position would be altered.

The provision of additional accommodation will enormously enhance the value of the hospital.

(4) Dr. Mackenzie devotes some space to a most interesting discussion on the modern conception of treatment in tuberculosis of the lung. The success of the sanatorium and its popularity are largely due to his own initiative and skill, coupled with the loyal co-operation of his staff.

(5) Dr. Ward, Pathologist, draws the attention of general practitioners in the City to the services available to them, particularly as regards the Wassermann reaction.

(6) The work of the hospital having increased so much of late years, the Committee decided during 1938 to appoint a Deputy Medical Superintendent.

The appointment of Dr. G. O. A. Briggs has been of the greatest assistance to Dr. Mackenzie.

# Report on the Isolation Hospital and Sanatorium for the year 1938

By

J C. HAMILTON MACKENZIE, M.D. (Glas.), D.P.H. (Lond.)  
Medical Superintendent.

I herewith submit the Annual Report on the work of the above Hospital for the year 1938.

Tables A and B show the number of various diseases admitted, discharged and died. See Tables A and B at the end of the Hospital report.

The statistics for the commoner Infectious Diseases will now be dealt with individually, the crude figures being adjusted by allowing for altered diagnosis, re-admissions, etc.

The statistics on the above diseases will be based on the verified cases discharged during the year.

## SCARLET FEVER.

Cases admitted	..	..	..	..	..	..	342
Cases discharged	..	..	..	..	..	..	366
Altered Diagnosis	..	..	..	..	..	..	28
Readmissions	..	..	..	..	..	..	2
Verified cases discharged	..	..	..	..	..	..	336
Deaths .. ..	..	..	..	..	..	..(Septic Scarlet Fever)	1
Mortality Rate	..	..	..	..	..	..	0.27%

### Concurrent Infections on admission :

Scarlet Fever and Acute Rheumatism	..	..	..	1
„ „ Chickenpox	..	..	..	3
„ „ Hennoch's Purpura	..	..	..	1

### Cross Infections :

With Diphtheria	..	..	..	..	..	..	4
„ Chickenpox	..	..	..	..	..	..	14
Return Cases ..	..	..	..	..	..	..	2
Return Case Rate	..	..	..	..	..	..	0.5%

## COMPLICATIONS.

Otorrhoea	..	..	..	..	..	..	24
Acute Nephritis	..	..	..	..	..	..	1
Albuminuria	..	..	..	..	..	..	2
Abscesses	..	..	..	..	..	..	1
Secondary Adenitis	..	..	..	..	..	..	22
„ Tonsillitis	..	..	..	..	..	..	2
Mastoiditis	..	..	..	..	..	..	1
Nasal Discharge	..	..	..	..	..	..	23
Minor Sepsis	..	..	..	..	..	..	11
Bronchitis	..	..	..	..	..	..	6
Arthritis	..	..	..	..	..	..	2
Other	..	..	..	..	..	..	12
Operations							
Mastoidectomy	..	..	..	..	..	..	9

Throughout the year Scarlet Fever remained of the same mild type as we experienced in the year 1937. There was one severe late case of Septic Scarlet Fever which died.

There were 18 cases of cross infection. Fortunately, 14 were due to Chicken Pox, a relatively innocuous disease. For the future, it is hoped that cross infection will be reduced by the provision of cubicle blocks which have recently been completed.

During the early part of the year, 36 cases of Scarlet Fever were refused admission on account of insufficient accommodation, but with the recently completed building extensions, it is hoped that this position will not arise again.

Complications were of a mild character, the majority of them being associated with minor sepsis. Otorrhoea remained the outstanding complication; it occurred in 24 cases, mostly in children under five years of age. In 18 cases the ear discharge commenced after admission, and in six cases, it was present prior to admission.

Mastoid operations had to be performed in nine cases; one case for acute mastoiditis, and the remainder to clear up persistent ear discharge.

The return case rate reached an abnormally low level.

## Treatment.

Throughout the year, we continued our policy of discharging uncomplicated cases, treated with Scarlet Fever Anti-toxin, in 14 days.

No. of cases receiving	no Anti-toxin	..	..	31	
„	„	Anti-toxin	..	..	312



For the greater part of the year, a refined type of anti-toxin was employed. The incidence of serum rashes was very greatly reduced, in fact only three serum rashes occurred with this particular preparation.

Sulphanilamide was used in the treatment of certain cases of Scarlet Fever, but this chemical preparation is not as effective in the treatment of the toxic phase of Scarlet Fever as Scarlet Fever anti-toxin. It was found, however, that the preparation was useful in the prevention of certain septic complications.

### Follow-up Clinic.

For many years, it has been our policy to examine all cases of Scarlet Fever one week after discharge from the hospital ; this Clinic is held at Regent Road. During the year, only two cases were re-admitted for further treatment on account of nasal discharge. In both cases, swabs were negative for haemolytic streptococci, and the discharges cleared up within a few days of readmission to hospital.

### DIPHTHERIA.

Cases admitted	..	..	..	..	..	..	711
Cases discharged	..	..	..	..	..	..	701
Altered diagnosis	..	..	..	..	..	..	192
Verified cases discharged	..	..	..	..	..	..	509
Deaths	..	..	..	..	..	..	30
Case mortality	..	..	..	..	..	..	5.8%

#### Concurrent Infections on Admission :

Diphtheria and Scarlet Fever	..	..	..	..	1
„ „ Chickenpox	..	..	..	..	1
„ Whooping Cough	..	..	..	..	1
„ „ Vincent’s Angina	..	..	..	..	1
„ „ Tonsillitis	..	..	..	..	1

#### Cross Infections :

With Scarlet Fever	..	..	..	..	..	12
„ Catarrhal Jaundice	..	..	..	..	..	1
„ Poliomyelitis	..	..	..	..	..	1



COMPLICATIONS.

Paralysis of Heart (a) Severe	..	..	..	..	..	31
„ „ (b) Slight	..	..	..	..	..	54
„ Ocular Muscles	..	..	..	..	..	22
„ Palate	..	..	..	..	..	50
„ Pharyngeal Muscles	..	..	..	..	..	4
„ Diaphragm	..	..	..	..	..	3
Broncho-Pneumonia	..	..	..	..	..	1
Lung Abscess	..	..	..	..	..	1
Laryngeal Diphtheria	..	..	..	..	..	9
Recovered	..	..	..	..	..	8

OPERATIONS.

				Cases.	Recovered.
Suction and Intubation	..	..	..	12	7

Virulence Tests:

Positive	..	..	..	..	..	49
Negative	..	..	..	..	..	89

Active Immunisation	..	..	..	..	..	30
---------------------	----	----	----	----	----	----

711 cases admitted, 509 verified cases discharged, and 192 cases with altered diagnosis.

These figures are phenomenal for the Leicester Isolation Hospital. This is the greatest number of cases of Diphtheria admitted in one year since the Hospital was opened in 1900.

The previous highest figure was 590 in 1901. In that year, 516 cases were discharged with 88 deaths, giving a fatality rate of 17 per cent. (See Table, page 87).

The fatality rate for the year under review is 5.8 per cent., this is slightly higher than last year, but is remarkably low considering the virulence of the disease, and the number of severe cases with which we dealt.

In my report for the year 1936, I anticipated an epidemic of virulent Diphtheria. The epidemic which commenced in September, 1937, and persisted throughout 1938 was generally of a severe and virulent type. The number of severe cases can be judged from the table on page 88.

Survey of the Fatality Rates from Diphtheria Treated in Leicester Isolation Hospital from 1900 to 1938.

Year.	Admitted.	Discharged.	Died.	Fatality Rate.	Year.	Admitted.	Discharged.	Died.	Fatality Rate.
1900	551	—	134	24.0	1920	413	387	37	9.5
1901	590	516	88	17.0	1921	274	250	24	9.6
1902	178	195	10	5.1	1922	143	138	13	9.5
1903	47	55	6	10.9	1923	125	114	9	7.9
1904	26	30	1	3.3	1924	395	309	31	10.0
1905	86	71	7	9.8	1925	336	351	32	9.1
1906	158	152	15	9.8	1926	346	298	38	12.7
1907	102	86	11	12.9	1927	285	*260	10	3.8
1908	92	83	9	10.8	1928	425	*390	16	3.9
1909	83	80	8	10.0	1929	232	*207	13	5.9
1910	70	72	5	7.0	1930	166	*181	6	3.2
1911	176	148	12	8.0	1931	118	*102	8	7.3
1912	143	134	15	11.0	1932	85	*55	6	10.9
1913	133	115	12	10.4	1933	335	*253	10	3.9
1914	110	94	15	15.9	1934	463	*353	16	4.5
1915	110	103	16	15.5	1935	447	*382	8	2.0
1916	92	86	8	9.3	1936	269	*235	6	2.5
1917	114	92	14	15.2	1937	456	*323	17	5.2
1918	147	138	15	10.8	1938	711	*509	30	5.8
1919	269	215	24	11.1					

\* Verified cases. Fatality rate == No. of deaths per 100 cases discharged.

**Table showing Mortality in Severe Cases.**

Type of Disease.	Number of Cases.	Deaths.	Mortality of the Group.
Group A. Early	34	6	} 39.3 per cent.
Late ..	32	20	
Group B .. ..	137	4	2.2 per cent.
Laryngeal ..	9	1	10.1 per cent.

Group A. Early. Malignant, with thin rapid spreading membrane.  
Late. Extensive membrane, with late toxic symptoms, admitted after third day of disease.

Group B. Moderately toxic cases.

Laryngeal. Respiratory symptoms predominate.

In the 30 deaths, nine patients died within 12 hours of admission, three within 24 hours of admission and three within 48 hours of admission. The disease was so virulent that intensive treatment had to be commenced within 48 to 72 hours of the commencement of the illness, before a favourable result could be anticipated.

The characters of the disease were not exactly typical. In the early stages, the condition could easily be mistaken for septic throat. We notified the medical practitioners of Leicester of the changing characteristics of the disease and advised all suspicious cases be admitted to hospital. Hence the large figure (192) for altered diagnosis.

**Classification of Types of Diphtheria Germs in Cases discharged during the year 1938.**

Gravis Type	..	..	..	..	..	..	..	362
Intermediate Type	..	..	..	..	..	..	..	15
Mitis Type	..	..	..	..	..	..	..	32
Atypical	..	..	..	..	..	..	..	16
Diphtheroid	..	..	..	..	..	..	..	4

The predominant organism, as in 1937, was the "Gravis" type. As detailed in my previous report, an epidemic of virulent Diphtheria coincides with a sudden increase in the "Gravis" strains of Diphtheria germs.

**Treatment.**

For severe and virulent Diphtheria, Antitoxin must be given immediately in large doses, by the intravenous route. This has been our policy in previous years, and this policy was maintained in the



current year. In several of the severe cases, unfortunately, this intensive treatment was of little avail if the disease had been present for three or more days. It would appear that, in some cases, the disease produced by the "Gravis" Diphtheria germ is so virulent that it quickly poisons the tissue cells and no amount of antitoxin will neutralise the damage done to these vital tissues.

Intensive serum treatment of severe Diphtheria was commenced in the year 1927 and reference to the table on page 87 will show that a fatality rate of 5.8 per cent. compares favourably with the fatality rate in any epidemic year.

The rate also compares favourably with the fatality rate of other towns where virulent Diphtheria has been predominant.

It seems probable that epidemics of the "Gravis" strains of organism are likely to visit various towns in this country at irregular intervals. For the next year or two, we may anticipate fewer cases of Diphtheria and in a milder form. There will probably be a fall in the fatality rate due to the raising of the level of the "herd" immunity amongst the child population. However, we must not be deluded. In all probability, Leicester will again be visited by a "Gravis" epidemic, consequently the lesson to be learned is that the child population should be actively immunised against Diphtheria. There is no question but that active immunisation is the best treatment for the prevention of Diphtheria.

Active immunisation will, in the main, prevent the disease in the individual child. However, in an epidemic with the "Gravis" type of organism, the immunised child may take Diphtheria, but the type of disease will always be mild and will never be of the severe forms which are described above.

In the next few years, the number of cases of Diphtheria will probably reach much lower levels, i.e., inter-epidemic periods and an inter-epidemic period is the best time for active immunisation. A campaign for active immunisation against Diphtheria was initiated by the Leicester Health Committee in 1937, and every opportunity should be taken by Leicester parents to avail themselves of these services.

### **Laryngeal Diphtheria.**

This type of Diphtheria is never prevalent in a "Gravis" epidemic. In the present year, there were only nine true cases of Laryngeal Diphtheria. There was one death from Diphtheritic Broncho-Pneumonia.



Suction and intubation were performed in 12 cases and 7 recovered. In four of the above cases, the disease was not essentially Laryngeal, but they were severe cases of Diphtheria where the membrane had extended not only into the naso-pharynx but also into the respiratory passages.

### Schick Tests and Active Immunisation.

Schick tests were performed on 170 patients who were admitted with doubtful Diphtheria. In 81 cases, the test was positive. Thirty children susceptible to Diphtheria were actively immunised against the disease.

### PUERPERAL PYREXIA.

Cases discharged	..	..	..	..	..	..	74
ANALYSIS OF CASES.							
					Cases.	Deaths.	
Puerperal Sapræmia	..	..	..	..	48	—	
„ Septicæmia		..	..	..	4	3	
Septic Abortions	..	..	..	..	16	2	
Mastitis	..	..	..	..	1	—	
Puerperal Scarlet Fever		..	..	..	1	—	
Perineal Sepsis	..	..	..	..	2	—	
Phlegmasia	..	..	..	..	2	—	
					—	—	
			Totals	..	..	74	5
					—	—	

Five deaths occurred in the 74 cases of Puerperal Pyrexia. Three deaths occurred from Septicaemia following full-time labour, one case from Staphylococcal Septicaemia, one from B.Coli Septicaemia and one from Streptococcal Septicaemia and Peritonitis. The two deaths following Septic Abortion were both due to Streptococcal Septicaemia, in one case the condition was complicated by pre-existing kidney disease and malignant endocarditis.

This hospital is now the central unit for the treatment of all cases of Puerperal Pyrexia within the city.

With the building extensions to the hospital, a separate unit has now been established for the treatment of this condition. The unit consists of individual cubicles opening by Crittal windows on to a verandah. A nursery and Operating Theatre are attached to the unit.

Complete pathological facilities are available for the early recognition of the causative organism and the control of treatment of the conditions.

Babies are admitted with mother for the maintenance of breast feeding.

Notes on all discharged cases are sent to the M. and C.W. Officer, in order that after care may be effectively followed up.

In cases where subsequent minor operations may be necessary, arrangements are made with the Gynaecological Department of the City General Hospital.

MEASLES

Cases discharged	..	..	..	..	..	..	22
Deaths	..	..	..	..	..	..	0

COMPLICATIONS.

<b>Bronchopneumonia</b>	..	..	..	..	..	2
<b>Submaxillary Adenitis</b>		..	..	..	..	1

During the year, only a limited number of cases of Measles could be admitted, but with the recent extensions to the hospital, it will be possible to admit all necessary cases occurring within the city.

Twenty-two cases were discharged and there were no deaths.

Bronchopneumonia was a complication in two cases.

A supply of convalescent Measles serum is always in stock in the hospital. This serum is not only employed within the hospital in the prevention of cross infection, but is given to other institutions and private practitioners for necessitous cases.

WHOOPING COUGH

Cases discharged	..	..	..	..	..	24
Deaths	..	..	..	..	..	9

COMPLICATIONS.

Bronchopneumonia	..	..	..	..	..	9
Convulsions	..	..	..	..	..	1
Mastoid Abscess	..	..	..	..	..	1
Marasmus	..	..	..	..	..	1
Corneal Ulcer	..	..	..	..	..	1

Twenty-four cases of this disease in young children were admitted in the early part of the year. The majority of the cases were complicated with a consequent high death rate. I would emphasise the

importance of early hospital treatment for children suffering from Whooping Cough and Measles, where home conditions are unsuitable for nursing. In the future, it will be possible to treat these cases under ideal conditions in the new cubicle blocks, which have recently been erected.

### CEREBRO SPINAL FEVER

Cases discharged	..	..	..	..	..	..	8
Deaths	..	..	..	..	..	..	3

Three deaths occurred in the early part of the year from this disease. In the later part of the year, a new preparation was employed in treatment and it would appear that results of treatment with this preparation will materially help in reducing the mortality rate still further.

### ERYSIPELAS

Cases discharged	..	..	..	..	..	..	33
Deaths	..	..	..	..	..	..	2

### COMPLICATIONS.

Septic Pneumonia	..	..	..	..	..	..	1
Cellulitis	..	..	..	..	..	..	1
Hypostatic Pneumonia	..	..	..	..	..	..	1
Sub-Cutaneous Abscess	..	..	..	..	..	..	1

Two deaths occurred in elderly persons where the condition was complicated by Pneumonia.

### TYPHOID FEVER

Cases discharged :							
Typhoid Fever	..	..	..	..	..	..	5
Paratyphoid B.	..	..	..	..	..	..	1
Deaths	..	..	..	..	..	..	1

Six cases were discharged with one death. The fatal case was complicated by Cerebral Thrombosis and proceeded to the "typhoid state."

### ACUTE ANTERIOR POLIOMYELITIS

Cases discharged	..	..	..	..	..	..	13
Deaths	..	..	..	..	..	..	Nil.



A mild epidemic of this condition occurred in the early part of the year. Thirteen cases were discharged. All notified cases were admitted to the hospital as emergencies and the children were put immediately into a position of physiological rest by means of plaster of Paris splintage.

A Masseuse attached to the Health Department attended the hospital three times a week, to carry out necessary massage and remedial exercises.

At the end of three months two patients were sent to the Orthopaedic Department of the City General Hospital for further orthopaedic treatment. The remainder of the cases made complete recovery and were discharged to their homes, but requested to attend the Orthopaedic Clinic for a further period of observation.

**Other Infectious Diseases Discharged during the year 1938.**

						Recovered.	Died.	Total.
Rubella	..	..	..	..	..	2	—	2
Tonsillitis	..	..	..	..	..	4	—	4
Chickenpox	..	..	..	..	..	6	—	6
Psittacosis	..	..	..	..	..	1	—	1
Dysentery	..	..	..	..	..	4	—	4
Lobar Pneumonia	..	..	..	..	..	1	—	1
Pemphigus	..	..	..	..	..	1	—	1
Mumps	..	..	..	..	..	2	—	2
Undulant Fever	..	..	..	..	..	1	—	1
Encephalitis	..	..	..	..	..	1	—	1
Tuberculous Meningitis	..	..	..	..	..	1	1	2
Meningo-Encephalitis	..	..	..	..	..	1	—	1
Other Diseases	..	..	..	..	..	10	1	11
Staff	..	..	..	..	..	41	—	41

**TUBERCULOSIS**

Reference to the accompanying tables will show the details of statistics relating to Pulmonary Tuberculosis during the year.

201 classified cases of Pulmonary Tuberculosis were admitted during the year and 143 were discharged.

The provision of Sanatorium bed accommodation was unfortunately very limited, due to the building extensions which have been taking



place. For male Tuberculosis cases, we were 20 beds short of our usual number, due to the demolition of Block 10 annexe. Furthermore, the displacement of Pulmonary Tuberculosis from Block 5 to Block 9 which took place during 1937, on account of the Diphtheria epidemic, aggravated the position further.

The pressure on the Female waiting list was fortunately relieved by temporarily opening Block 2 for Female Tuberculosis on June 20th, consequently, it was possible to admit more females than males throughout the year.

I am glad to state that in the year 1939 this unfortunate shortage of beds will be greatly relieved, by the opening of a new Women's Sanatorium of 80 beds.

Anstey Lane Children's Hospital was again opened on May 13th, for the treatment and observation of children of Tuberculous parents. This building has served its function well but the structure is now so dilapidated that it will be impossible to maintain this hospital much longer. The Health Committee have decided to demolish the hospital and plans are in hand for the erection of a new Children's Hospital.

#### Period of Residence.

	<i>Under 3 months.</i>	<i>3 to 6 months.</i>	<i>6 to 12 months.</i>	<i>More than 12 months.</i>
<b>Cases</b>	38	75	69	24

It will be observed that the largest proportion of cases had periods of treatment from 3 to 12 months. The majority of these cases are, of course, adults. Twenty-four had periods of treatment of over 12 months, they are classified as follows :—

	<b>T.B.—</b>	<b>T.B.+ Group 1.</b>	<b>T.B.+ Group 2.</b>	<b>T.B.+ Group 3.</b>
<b>Cases</b>	0	3	16	5

It will be observed that the largest proportion of cases receiving periods of treatment of over 12 months had a moderately advanced type of disease.

#### Treatment.

There has been a gradual evolution in the conception of the treatment of Pulmonary Tuberculosis. Our ideas on the pathology of the disease

have improved with the advances in X-ray technique. From radiology we have learned the different types of disease, which may affect an individual, at different age groups. In childhood, Pulmonary Tuberculosis is comparatively rare, but it may occur in one of several forms, each requiring special treatment. In the adolescent and young adult, the disease is most acute. Here again, lesions in the lung vary considerably. In middle life the disease is much more chronic, and in old age, the lung lesions generally take the form of old scars. It is obvious, then, that every case of Pulmonary Tuberculosis requires individual consideration.

From the nature of the disease process, cavities are formed in the lungs, and in the majority of cases, the success of "cure" depends on the healing of these cavities. The most effective method of healing cavities is by Collapse Therapy. Artificial pneumothorax is a simple and efficient form of Collapse Therapy. Fortunately, this type of treatment is more readily attained in the adolescent and young adult. In a number of cases, artificial pneumothorax may not effectively close the cavity; in such cases, various minor operative procedures are possible, to help us in attaining our objective; such measures as adhesion section through a Thoracoscope, and Phrenic Avulsion. When artificial pneumothorax has been impossible, from mechanical reasons, there are more major surgical procedures which will help us to obtain "cure" in suitable cases.

In our new Sanatorium scheme, which is nearing completion, an operating suite has been erected, and in order that Leicester may have the advantage of modern thoracic surgery, the Health Committee have appointed Mr. T. Holmes Sellors as Thoracic Surgeon. Mr. Sellors will attend the hospital one day per month.

The progress of healing in each individual patient is accurately assessed by serial radiography i.e., routine monthly, or three monthly, X-ray films. Further guides in the control of treatment are the monthly performance of blood sedimentation rates and sputum examinations. Every case is completely reviewed at three monthly intervals.

Apart from the more active forms of therapy a Sanatorium régime involves the education of the patient in his disease and the mode of life he is expected to carry out on leaving the Sanatorium. These are the daily tasks of the medical and nursing staff; they are not so spectacular as the surgical procedures but they are equally important.

	In Hosp. on 1st Jan., 1938	Adm. during year	Disch. during year	Died during year	In Hosp. on 31st Dec. 1938
(a) Number of doubtfully tuberculous cases admitted for observation :—					
Adult males .. ..	—	29	29	—	—
Adult females .. ..	2	25	27	—	—
Children .. ..	1	90	60	—	31
Total .. ..	3	144	116	—	31
(b) Number of patients suffering from pulmonary tuberculosis :—					
Adult males .. ..	44	83 32 Holt	72 32 Holt	9	46
Adult females .. ..	42	105 29 Holt	62 29 Holt	17	68
Children .. ..	2	13 6 Holt	9 6 Holt	2	4
Total .. ..	88	201	143	28	118
(c) Number of patients suffering from non-pul- monary tuberculosis :—					
Adult males .. ..	—	—	—	—	—
Adult females .. ..	—	—	—	—	—
Children .. ..	—	—	—	—	—
Total .. ..	—	—	—	—	—
Grand Total (a), (b) and (c)	91	345	259	28	149

Diagnosis on discharge from observation.	For Pulmonary Tuberculosis.						For Non-pulmonary Tuberculosis.						Totals.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous ..	2	1	—	6	7	11	—	—	—	—	—	—	8	8	11
Non-tuberculous ..	14	15	5	7	4	44	—	—	—	—	—	—	21	19	49
Doubtful ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals ..	16	16	5	13	11	55	—	—	—	—	—	—	30	27	60



TABLE E. As required by the Ministry of Health.  
RESULTS OF TREATMENT. GROBY ROAD SANATORIUM.

Classification on admission to the Institution.			Condition at time of discharge.	Duration of Residential Treatment in the Institution.												
				Under 3 months.			3-6 months.			6-12 months.			More than 12 months.			TOTAL
				M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent .. ..	2	—	—	3	2	1	—	—	—	—	—	—	8	
		Not Quiescent ..	4	3	1	3	7	4	1	2	1	—	—	—	26	
		Died in Institution ..	—	1	—	—	—	—	—	—	—	—	—	—	1	
	Class T.B. plus Group 1.	Quiescent .. ..	—	—	—	1	—	—	2	—	—	2	—	—	5	
		Not Quiescent ..	2	2	—	—	5	1	6	9	—	1	—	—	26	
		Died in Institution ..	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Class T.B. plus Group 2.	Quiescent .. ..	2	—	—	1	1	—	—	—	—	—	1	—	5	
		Not Quiescent ..	12	3	—	17	16	—	20	16	—	10	3	—	97	
		Died in Institution ..	—	1	—	1	3	—	—	2	—	—	2	—	9	
	Class T.B. plus Group 3.	Quiescent .. ..	—	—	—	—	—	—	—	—	—	—	—	—	—	
		Not Quiescent ..	—	—	—	1	5	—	3	1	1	3	1	—	15	
		Died in Institution ..	3	2	—	—	3	—	3	2	—	—	1	—	14	

Special Treatment for Pulmonary Tuberculosis carried out in the Sanatorium during 1938.

Artificial Pneumothorax :

New cases induced	..	..	..	..	..	54
Refills (In-patients)	..	..	..	..	..	1929
„ (Out-patients)	..	..	..	..	..	2260
Total .. ..						4,243
Aspirations and Air replacements	..	..	..	..	..	156
„ „ „ Out-patients	..	..	..	..	..	64
Gold injections	..	..	..	..	..	853
Blood examinations	..	..	..	..	..	1282

Out of 188 adult cases of Pulmonary Tuberculosis admitted to the Hospital, 54 patients had Pneumothorax successfully induced. 1929 Pneumothorax refills were given during the year



## **Out-Patient Refill Clinic.**

The number of patients attending this Clinic continues to increase every year. 2,260 refills and 64 aspirations and air replacements were given throughout the year.

All Pneumothorax patients, both In-patients and Out-patients, have a radiological screen examination before a refill : they have an X-ray examination every month. The Out-patients are reviewed every three months in the same way as In-patients.

## **Observation Cases.**

As complete examination of patients can only be obtained in the Sanatorium, all doubtful cases of Tuberculosis are admitted to this Hospital.

During the year, 116 patients were discharged after observation, 56 adults and 60 children. Sixteen adults and 11 children were diagnosed as Tuberculous and 40 adults and 49 children diagnosed as "Not Tuberculous."

## **Convalescent Sanatorium, "Home Place," Holt.**

The citizens of Leicester are fortunate in having such a beautiful Sanatorium as "Home Place" situated on the Norfolk Coast.

This Hospital has been invaluable to us in the year under review. With the shortage of beds in the Sanatorium, it was possible to relieve our accommodation considerably by using the beds at "Home Place." Under the exceptional circumstances, "Home Place" had to take some patients who required more nursing than usual and considerable strain was thrown on to the Nursing staff. I must thank the staff of this Hospital for the excellent services they rendered us.

Fundamentally, the cases selected for treatment at "Home Place" are those requiring prolonged Sanatorium treatment; the initial period of recumbency being given at Groby Road and the ambulatory period being carried out at "Home Place."

In the first six months of the year, the Sanatorium was open for men and in the second six months, for women.

## X-RAY DEPARTMENT.

	In-patients.	Out-patients.	Total.
Chest Films .. .. .	1525	1988	3513
Lipiodal Examinations (chest)	41	—	41
Films of Bones and Joints ..	21	257	278
Screen Examinations (chest)	1355	2411	3766
Ante-Natal Films .. ..	—	68	68
Dental Films .. .. .	2	—	2
Staff .. .. .	44	—	44
X-Ray Renal Tract .. ..	1	—	1
Barium Meal .. .. .	6	—	6
City Mental X-Rays .. ..	—	9	9

The X-ray Department is the “nerve centre” of the Tuberculous side of the Hospital. The increasing work in this Department reported in 1937 was maintained throughout 1938. 1,525 chest films of In-patients were taken and 1,988 chest films of Out-patients. The large number of films taken for In-patients is due to serial radiography. The Out-patient chest films are taken for the Tuberculosis Dispensary and the Out-patient Clinic.

For the early diagnosis of Tuberculosis, an X-ray film of the chest is not only useful but necessary. There is close co-operation between the Tuberculosis Dispensary and the Hospital, and two sessions per week are reserved for X-raying patients referred by the Tuberculosis Officer. In co-operation with the Tuberculosis Officer, we X-ray as many adolescent and young adult contacts as possible. That our patient work is bearing fruit is evidenced by the fall in the death-rate from Pulmonary Tuberculosis and the remarkable fall in the number of new notifications.

The Out-patient films of bones and joints were taken for the Orthopaedic Clinic, and Ante-Natal films were taken for the Maternity and Child Welfare Service.

All Out-patient films are reported on at the Hospital and reports forwarded to their respective departments.

### Laboratory.

The work of this department has been under the care of Dr. E. M. Ward.

Dr. Ward, the Pathologist, the Medical Superintendent and the Deputy Medical Superintendent hold Home Office Licences for animal experiments.

Details of the Laboratory work will be given in the following report.

## **Report of the Work in the Laboratory of the Leicester Isolation Hospital.**

By Dr. E. M. WARD, M.D. (Lond.)

The year under review has been one of continued progress.

The epidemic of Diphtheria has continued throughout the year and a total of 11,888 swabs have been examined for the corynebacterium Diphtheriae. The Gravis type of organism has continued to be predominant—being present in 86.3 per cent. of positive cases compared with 66 per cent. in 1937.

We have used Loeffler medium and Macleod's Tellurite medium throughout the year. It is hoped to investigate the properties of a new medium (Clauberg's Tellurite) for the cultivation of this type of organism in the hope that it will help the efficiency of the laboratory. This is a "spot" medium and enables the presence of K.L. Bacillus to be shown without microscopical examination.

### **Haemolytic Streptococci.**

The Laboratory has examined for the presence of Haemolytic Streptococci 109 swabs from Puerperal Pyrexia contacts at Westcotes Maternity Hospital and 844 Throat Swabs and 134 Cervical Swabs from patients in this Hospital. The majority of the Hospital swabs are obtained from Scarlet Fever Wards prior to discharge. The others come from cases of Puerperal Pyrexia. We have been unable to place the Streptococci in Lancefield's groups but have been content to report on the presence or absence of haemolysis.

### **Clinical Pathology.**

The number of clinical pathological investigations made seems to be constantly increasing. The number of Blood Counts has increased by 50 per cent. This is partly due to the onset of an epidemic of Pertussis. It is found that a White Blood Count is a considerable help in the diagnosis of this disease. This is more noticeable at the City General Hospital, where it is important to make a diagnosis at the earliest possible moment so that the case can be transferred, before spreading infection.

### **Examination for Tubercle Bacilli.**

A total of 3,819 examinations have been made for the presence of the tubercle bacillus. This total includes 179 specimens obtained by stomach lavage from children in Anstey Lane Hospital. These



specimens and 118 faeces specimens have been examined directly by culture on Petrognani's medium and by animal inoculation. This is part of an investigation into the incidence of open Tuberculosis in these children. Stomach lavage is found to be quite a reliable procedure in small children who tend to swallow their sputum.

### **Animal Experiments.**

During the latter part of the year the new guinea pig house has been used and we now have much more accommodation. The animal cages are now placed in three tiers on pipe framing with the result that it is much easier to keep the house clean and the space available is used to the best advantage. A new-covered fodder room and inoculating room have also been provided. 993 inoculation experiments have been carried out during the year.

Twelve positive results were given from milk samples but this year the 3-weeks' results have not been very satisfactory—only positive in six cases, giving a 50 per cent. error.

The number of mice inoculated for typing pneumococci has increased recently following the use of M. & B. 693 in the treatment of Pneumonia. Direct typing now often fails owing to the action of the drug on the pneumococcus.

### **Venereal Disease Pathology.**

This year's total has reached 3,147 and has been greatly responsible for the increase of the work of the laboratory. The great majority of the specimens come from the City General Hospital—only 200 specimens being received from other sources for a Wassermann Reaction. Very few General Practitioners make use of this Service and I would like to bring this matter again before their notice. Outfits can be obtained from the Health Department, Grey Friars and the specimens deposited there. If more convenient the Pathologist will arrange to see any patient at home, at either Hospitals, or at the Health Department. It might be of interest to point out that a positive Wassermann Reaction was obtained this year in 10 per cent. of all cases of cardio-vascular disease in males over 40, in 15 per cent. of female cardio-vascular diseases and in 3 per cent. of cases from the antenatal clinic.

### **Investigations for General Practitioners.**

The Pathologist is willing to undertake pathological investigations for any General Practitioner in Leicester. This Service is intended to help insurance and Public Medical Service patients who cannot afford



to pay the fees of the Pathologists in the town who undertake private work. A small fee may be charged in some cases ; the fee being collected by the City Treasurer's Department. An arrangement for the collection of specimens can be made if the General Practitioners get into communication with the Pathologist by telephone at either of the City Hospitals.

### Media Manufacture.

All the media used in the Laboratories at the City General Hospital and at the City Isolation Hospital are prepared at Groby Road. This year 17,300 tubes of media have been prepared and over 3,000 sterile swabs supplied to the Health Department.

The total investigations carried out in the Pathological Department of the Health Committee this year reaches the figure of 30,931 compared with 23,368 for the year 1937.

### LABORATORY REPORT 1938

#### Swabs examined for *Corynebacterium Diphtheriae* :—

	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
From General Practitioners.. ..	122	1657	1779
„ School Clinic and Medical Officer of Health .. ..	21	986	1007
„ Wards .. ..	1029	8073	9102

#### Typing of *Corynebacterium Diphtheriae*.

Gravis Type .. ..	366
Intermediate .. ..	12
Mitis Type .. ..	30
Atypical .. ..	16
Organisms not Diphtheria ..	60
	<hr/>
	484

#### Sputum examined for Tubercle Bacilli :

	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
From Out-patients .. ..	200	157	357
„ Wards .. ..	1082	1587	2669
Urines examined for Tubercle Bacilli .. ..	..	..	20
Pus „ .. ..	..	..	21
Laryngeal Smears „ .. ..	..	..	129
Pleural Fluids „ .. ..	..	..	11
Faeces examined „ .. ..	..	..	118
Stomach Lavage „ .. ..	..	..	179
Breast Milk „ .. ..	..	..	1
Cerebro Spinal Fluids „ .. ..	..	..	18
Faeces cultured for Tubercle Bacilli .. ..	..	..	118
Stomach Lavage „ .. ..	..	..	179
Pericardial Fluids „ .. ..	..	..	1

## Throat Swabs cultured for Haemolytic Streptococci :

From Westcotes Maternity Home	..	..	..	109
From Wards	..	..	..	844
Cervical and Urethral Swabs cultured for Haemolytic				
Streptococci	..	..	..	134
Blood cultured for Haemolytic Streptococci	..	..		95
Breast Milk	„	„	„	4
Throat swabs examined for Vincent's Spirillae	..	..		65
Cough Plates examined for Bacillus Pertussis	..	..		23
Urines cultured for organisms of Typhoid Group	..			20
Faeces	„	„	„	35
Faeces	„	„	Dysentery Group	3
Widal Reactions	..	..	..	36
Faeces examined for occult blood	..	..	..	21
Complete blood counts	..	..	..	478
Blood Grouping (Donors)	..	..	..	71
Cell Counts on Cerebro Spinal Fluids	..	..	..	167
Wassermann Reactions	..	..	..	1417
Wassermann Reactions (C.S.F.)	..	..	..	81
„	„	(Blister Fluid)	..	1
„	„	(Ascitic Fluid)	..	1
„	„	(Pericardial Fluid)	..	1
Kahn Tests	..	..	..	1409
Complement Deviation Tests (Gonococcus)	..	..		150
„	„	(Tubercle)	..	27

## ANIMAL EXPERIMENTS.

Inoculation of K.L.B. for Virulence	..	..	..	225
Virulence Tests carried out for City General Hospital	..			50
„	„	County and General Practitioners		16
Inoculation of body fluids for Tubercle Bacilli	..	..		234
„	„	„	(C.G.H.)	39
„	„	„	(County)	2
„	„	„	(General Practitioners)	5
„	„	„	„ Bacilli (L.R.I.)	7
Inoculation of Sputa for Pneumococci	..	..	..	25
Inoculation of Milk Sediment for Tubercle Bacilli :				
(Positive in 3 weeks)	6	;	(Positive in 6 weeks)	12
Inoculation of Milk Sediment for Tubercle Bacilli, Leicester				
Frith	..	..	..	4
Post Mortem examinations	..	..	..	32
Total Experiments				22,410
Sterile swabs prepared for Health Department				
Media manufactured in laboratory for Isolation Hospital	..	..	..	3,057
and City General Hospital	..	..	..	17,300

### Experiments performed at Isolation Hospital for City General Hospital.

Widal Reactions	..	..	..	..	..	27
Wassermann Reactions	..	..	..	..	..	1216
Kahn Reactions	..	..	..	..	..	1190
Complement Deviation Tests						
„ (Gonococcus)	..	..	..	..	..	140
„ (Tubercle)	..	..	..	..	..	27
Wasserman Reactions (C.S.F.)	..	..	..	..	..	70
Animal Inoculations	..	..	..	..	..	114
Total Experiments						2,784

### Experiments performed at City General Hospital for Isolation Hospital.

Blood Urea estimation	..	..	..	..	..	4
Blood Counts	..	..	..	..	..	6
Blood Sugar Estimations	..	..	..	..	..	5
Blood Sulphaemaglobin	..	..	..	..	..	3
Van Der Bergh Reaction	..	..	..	..	..	8
Icterus Index	..	..	..	..	..	3
Biochemistry of C.S.F.	..	..	..	..	..	32
Sedimentation and Cell Volume	..	..	..	..	..	2
Fractional Test Meals	..	..	..	..	..	5
Blood Urea Clearance	..	..	..	..	..	3
Pleural Fluids	..	..	..	..	..	2
Urines (biochemistry)	..	..	..	..	..	2
Microtome sections	..	..	..	..	..	12
Total Experiments						87

### Staff.

Within recent years, the medical work in the Hospital has increased so much that it was decided to appoint a Deputy Medical Superintendent; on 13th June, 1938, Dr. G. O. A. Briggs was appointed to this post.

Dr. A. Leggett was appointed Resident Medical Officer on 1st February in place of Dr. J. G. Hailwood, resigned. Dr. E. H. Tomlin was appointed Resident Medical Officer on 8th November in place of Dr. C. D. Preston, resigned.

The Administrative personnel of the Nursing staff remains the same as in 1937 with the exception of Miss M. I. Adams, who was appointed Sister Tutor on 1st January.

Mr. H. I. Rees was appointed Steward on 17th March.



**Staff Illness.**

Tonsillitis	..	..	..	..	..	..	..	29
Influenza	..	..	..	..	..	..	..	5
Scarlet Fever	..	..	..	..	..	..	..	1
Catarrhal Jaundice	..	..	..	..	..	..	..	2
Vincent's Angina	..	..	..	..	..	..	..	1
Scabies	..	..	..	..	..	..	..	1
Acute Pharyngitis	..	..	..	..	..	..	..	1
Cervical Adenitis	..	..	..	..	..	..	..	1
Diphtheria	..	..	..	..	..	..	..	1
Typhoid Fever	..	..	..	..	..	..	..	1
Erythema Nodosum	..	..	..	..	..	..	..	1
Erythema Multiforme	..	..	..	..	..	..	..	1
Submaxillary Adenitis	..	..	..	..	..	..	..	1
Septic Finger	..	..	..	..	..	..	..	1
Abscess of Leg	..	..	..	..	..	..	..	1
Oedema of Legs	..	..	..	..	..	..	..	1
Injury to Knee	..	..	..	..	..	..	..	1
Whitlow	..	..	..	..	..	..	..	1
Generalised Vaccinia	..	..	..	..	..	..	..	1

**Immunisation of Nursing Staff against Diphtheria.**

The Schick test was performed on 33 nurses—18 nurses gave a positive reaction and they were all actively immunised against Diphtheria. The Schick Test was performed on 4 maids — 2 maids gave a positive reaction and they were actively immunised against Diphtheria.

**Building and Equipment.**

The building extensions to the Hospital which were commenced in 1937 were continued throughout the current year. The scheme provides for :—

- Infectious Diseases .. 4 Cubicle Blocks (48 beds).
- Tuberculosis .. Women's Sanatorium of 80 beds.
- Treatment Centre .. Providing Operating Theatre, Dental Room and Recovery Rooms.
- Patients' Dining Rooms and Assembly Hall.
- Laundry.

The whole of the above extensions will be in complete working order in 1939.

J. C. H. MACKENZIE.

ISOLATION HOSPITAL AND SANATORIUM. TABLE A.

Number of Patients admitted, discharged and died during 1938.

Disease.		Remaining 31st December, 1937	Admitted during Year.	Discharged during Year.	Died during Year.	Remaining 31st December, 1938
Scarlet Fever	.. ..	31	342	367	1	5
Diphtheria	.. ..	86	711	685	34	78
Tuberculosis	.. ..	88	287	198	28	149
Tuberculosis Observation Cases	.. ..	3	44	47	—	—
Measles	.. ..	—	25	24	—	1
Enteric ..	.. ..	2	8	8	1	1
Scabies	.. ..	—	—	—	—	—
Chickenpox	.. ..	—	6	5	—	1
Erysipelas	.. ..	—	35	32	1	2
Puerperal Fever	.. ..	8	77	78	5	2
Tonsillitis	.. ..	3	23	26	—	—
Cerebro-Spinal Fever	.. ..	—	10	7	3	—
Babies	.. ..	2	44	44	—	2
Whooping Cough	.. ..	1	37	20	8	10
Pneumonia	.. ..	—	4	4	—	—
Other Diseases	.. ..	3	91	77	9	8
Total		227	1744	1622	90	259

## ISOLATION HOSPITAL AND SANATORIUM.

TABLE B.

Patient Days during 1938-1939.

				For 12 months ending Dec. 31st, 1938.	For 12 months ending March 31st, 1939.
Smallpox	..	..	..	—	—
Smallpox Contacts	..	..	..	—	—
Scarlet Fever	..	..	..	7460	5498
Diphtheria	..	..	..	29092	27253
Puerperal Fever	..	..	..	2273	1888
Measles	..	..	..	435	443
Cerebro-Spinal Fever	..	..	..	97	112
Other Infectious Diseases	..	..	..	2682	2351
Whooping Cough	..	..	..	931	2259
Poliomyelitis	..	..	..	1095	1301
Erysipelas	..	..	..	407	536
Pemphigus	..	..	..	64	26
Typhoid Fever	..	..	..	227	126
Meningitis	..	..	..	67	66
Pneumonia	..	..	..	152	330
Dysentery	..	..	..	40	40
Tuberculosis :—					
Adults	..	..	..	37505	39931
Discharged Soldiers	..	..	..	61	8
Children	..	..	..	6833	9624
Observation Cases	..	..	..	1499	1308
				90920	93100

## SUMMARY.

Infectious Diseases	..	..	..	45022	42229
Tuberculosis	..	..	..	45898	50871
Total	..	..	..	90920	93100

TABLE 17.

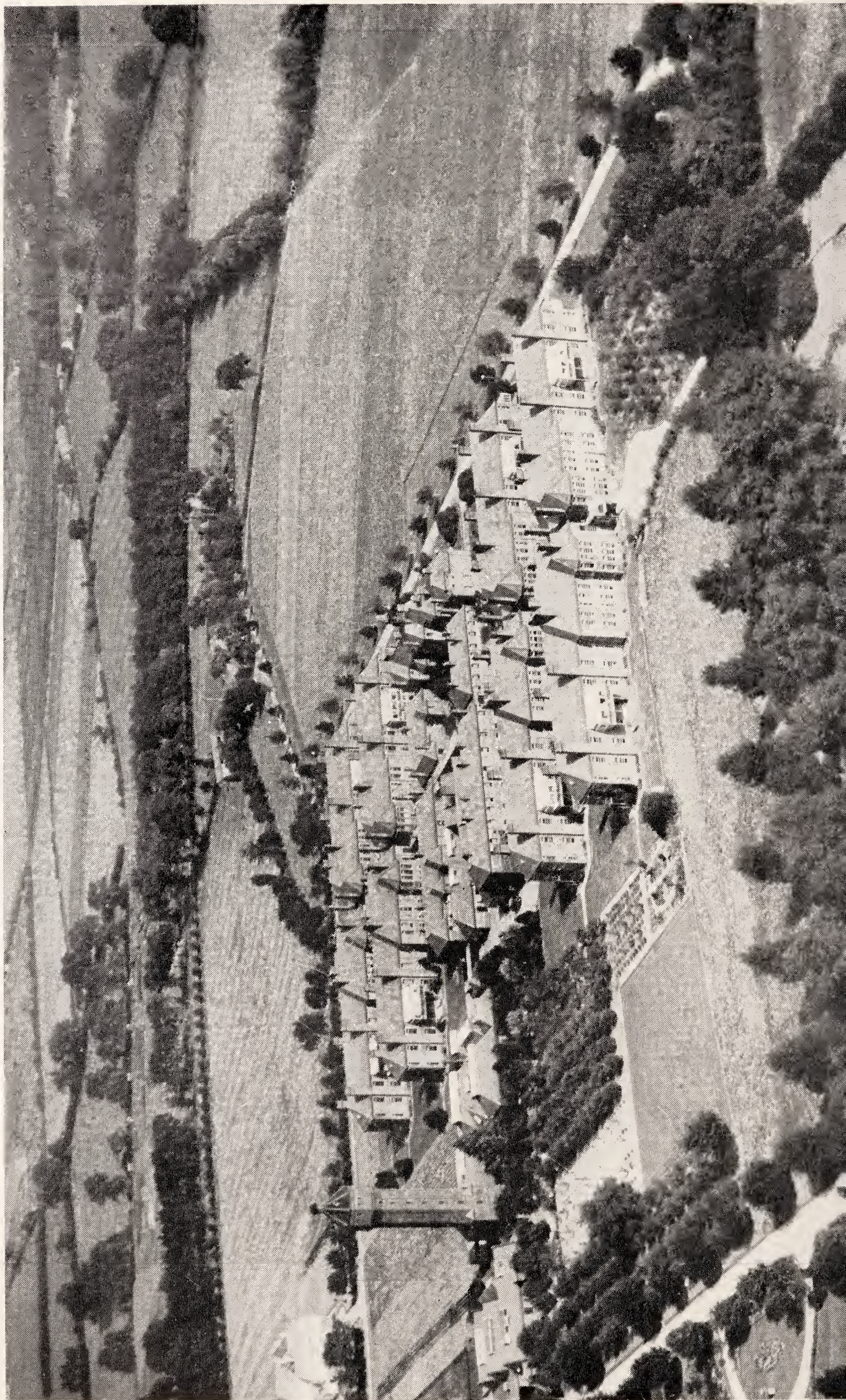
Showing the number of Cases notified of the principal Notifiable Diseases for the  
Fourteen Years, 1925-1938.

DISEASE.	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Smallpox .. .. .	72	0	6	90	320	1192	1353	183	0	0	0	0	0	0
Scarlet Fever .. .. .	774	477	620	1971	517	423	404	463	432	1401	1405	534	611	551
Diphtheria .. .. .	350	366	309	461	253	198	115	76	338	463	424	267	454	692
Enteric Fever.. .. .	4	3	3	6	2	5	3	1	1	4	13	12	12	6
Erysipelas .. .. .	126	110	132	141	158	99	108	90	150	182	161	145	125	145
Puerperal Fever .. .. .	7	22	9	10	11	12	8	13	9	13	12	14	7	0
Puerperal Pyrexia .. .. .	..	21	34	45	25	50	32	48	52	38	52	81	106	120
Phthisis .. .. .	606	650	700	668	657	582	511	442	438	332	460	355	345	310
Other Forms of Tubercle .. .. .	77	77	80	117	77	66	61	69	74	71	100	79	88	84
Ophthalmia .. .. .	37	36	38	24	35	32	14	20	18	24	21	17	28	30
Cerebro-Spinal Fever .. .. .	2	4	4	4	8	11	16	13	6	5	10	6	10	15
Poliomyelitis .. .. .	..	81	8	8	4	3	..	2	4	1	13	1	2	26
Encephalitis Lethargica .. .. .	26	14	9	7	4	3	7	2	30	2	1	0	2	2
Pneumonia .. .. .	239	143	236	239	364	202	216	236	47	259	239	301	523	385
Chickenpox .. .. .	639	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals .. .. .	2959	2004	2188	3791	2435	2878	2848	1658	1869	2795	2911	1812	2313	2366











# **Report on the City General Hospital, Leicester, for the year 1938**

By

ERNEST C. HADLEY, M.D., B.S.(Lond.), F.R.C.S.E.

M.R.C.S.(Eng.), L.R.C.P.(Lond.)

Medical Superintendent, General Surgeon, Electrocardiologist,  
Lecturer and Internal Examiner for Nurses.

With foreword by the Medical Officer of Health.

## COMMENT BY THE MEDICAL OFFICER OF HEALTH.

In presenting Dr. Hadley's report on the work of the City General Hospital for 1938, there are only one or two comments I wish to make.

(1) The excellent standard of work achieved of late years has been continued and even enhanced.

(2) The new maternity unit has been very popular, no less than 552 confinements taking place as compared with 339 in the previous year.

It must be emphasised again that the accommodation now in use is only of a temporary character, and the time is not far distant when a permanent unit will have to be built.

(3) The provision of temporary additional quarters for extra nursing staff has proved of great value.

Unfortunately, owing to certain matters outside our control, it has been impossible to proceed further with the proposed scheme of extensions.

(4) The work of the Pathological Laboratory shows a marked increase.

(5) For the first time, a report on the Climatological Station recently established at the hospital is included.



# Report on the City General Hospital, Leicester, for the year 1938

By

ERNEST C. HADLEY, M.D., B.S.(Lond.), F.R.C.S.E.  
M.R.C.S.(Eng.), L.R.C.P.(Lond.)

Medical Superintendent, General Surgeon, Electrocardiologist,  
Lecturer and Internal Examiner for Nurses.

---

The Foundation Stone of this Hospital was laid in 1903 and it was opened for the reception of patients on 29th September, 1905.

It was administered by a Visiting Medical Officer, the late Dr. Dodd, until 1914. On 1st July, 1914, a Medical Superintendent was appointed.

From 1914 to 1919 the Hospital was taken over by the Council of War for the reception of British Sick and Wounded Soldiers in the Great War.

On 1st April, 1930, the Hospital was "appropriated" by the City Council under the Public Health Act, 1875-1926, as extended by Section 14(2) of the Local Government Act, 1929, from which date the Hospital was re-named "The City General Hospital."

The Hospital is situated on a site comprising now approximately 110 acres. It is 336.55 feet above sea level, the highest point on this side of the valley in which Leicester lies. For example, Leicester Market is 207 feet, Victoria Park 290 feet, Spinney Hill Park 262 feet respectively above sea level.

The original cost of 62 acres was £6,920 and the original cost of the building £79,575. The Hospital consists of four two-storey Pavilions each containing four Ward units.

The original authorised accommodation was 550 beds, but owing to certain parts of this accommodation being put to purposes other than bed accommodation this has been reduced to 497.

But it should be noted that during the last few years 136 beds have been added in the form of open-air pavilions which are not recognised

by the Ministry of Health as permanent accommodation, but which increase the potential accommodation to 633 beds.

The wards, 16 in number, are 88 feet 6 inches long, 24 feet wide and 12 feet high, having a cubical space of 25,488 feet and contain 28 beds, giving a cubical space for each patient of 910  $\frac{2}{7}$  feet.

Heating has been entirely reorganised and is now entirely by low pressure steam radiators, open coal fires and stoves having been eliminated.

**Side Wards.** Each ward has adjacent to it a three-bedded ward 19 feet 6 inches by 15 feet by 12 feet and a single-bedded ward, 14 feet by 10 feet 6 inches by 12 feet, but several of these side wards have had to be set aside for special departments. Those still used for their original purpose have been fitted with atmospheric steam jets which have entirely replaced the use of electric and methylated spirit-heated bronchitis kettles which were very unsatisfactory. Illuminated viewing screens for viewing X-ray films have been fitted in each ward. Every patient has available and controllable by themselves, wireless headphones and an electric reading lamp.

**The Laundry.** The steam laundry has recently been entirely re-organised and new machinery installed, the plant now being run entirely by electric power, previously by steam.

**The Tower,** which is a landmark, surrounds the main chimney stack and houses an octagonal tank made of cast iron, which supplies the Hospital with water ; the tower is 130 feet high and the height of the bottom of the tank from the ground is 90 feet.

### **The Maternity Department.**

Ward 16 and its adjacent side wards and day room, has been set aside as a Maternity Department, the large ward divided up into cubicles. The old Maternity Department has been divided up to accommodate more Nurses. This department has now become very attractive as shown by the increase in the number of confinements from 339 to 552 ; it is already outgrowing the new accommodation. It is, we find, a great advantage to have the Maternity Department adjacent to the Gynaecological Department and near to the Operating Theatre so that all emergencies and abnormalities can be easily and promptly dealt with. I must also thank Dr. Seager and

Sister Quinn for the energy and enthusiasm they have displayed in this work and in the Ante-natal work which is being done. Their popularity in no small measure has contributed to the rapid extension of this Department. (See special Maternity Department Report below.)

The effect of the appropriation was that the character of the work of the Hospital has progressively altered so that at the present time the Hospital, as its name implies, is a General Hospital in every sense of the word and all types of cases can be dealt with upon the most modern and approved lines.

The area served by the Hospital is :—

**City of Leicester.** Population—estimated 1938—263,300.

**County of Leicestershire.** To a limited extent, viz. :

The County Orthopaedic and Surgical Tuberculosis cases of the County Education Committee and others.

The County Public Assistance cases that need specialised and Modern Hospital Treatment.

The mode of admission and conditions of eligibility for treatment were altered from the date of appropriation, suitable cases being accepted at the discretion of the Medical Superintendent on the recommendation only of the patient's own doctor, a condition of admission being that the patient is normally resident within the City of Leicester ; it should be noted, however, that arrangements have been made with the County Authorities by which cases from the County can be treated, provided that the Medical Officer of Health for the County, or the Public Assistance Officer of the County, authorises and recommends such a patient for treatment.

It should be noted also that Saturday Hospital Fund contributors, resident in the City, are eligible for admission as patients to this Hospital without any financial call being made upon them, as the Saturday Hospital Committee have agreed to assume responsibility, by arrangement with the City General Hospital Committee.

Nursing problems, which are not local problems but National, still give us anxiety. The Committee has provided good additional temporary accommodation on the Hospital site for nurses which has enabled us to dispense with the University Road Hostel which was very inconvenient but which tided us over a period of extreme difficulty.

Applications for Sisters, Staff Nurses and Student Nurses, except in the cases of Male Student nurses, meet with a very meagre response. The General Nursing Council have at last, during the year, given us



permission to train a limited number of male student nurses and we have now in training five of these.

The Nursing staff, under the direction of Miss Claye, have worked well in the interests of their patients, in many cases longer hours than are considered desirable—but ungrudgingly. The domestic work of the nurses has been considerably reduced during the year by the appointment of an Orderly and Ward Maid to each Ward.

I feel that the standard of work of the Hospital is largely dependent upon the enthusiasm and attention to details of the Resident Medical Staff.

I have in Dr. Page, my deputy, and in Drs. Seager, Brown, Fawcett and Abramson, and had in Dr. Shine (who left in August, 1938), a most able and reliable team of well-qualified men who have made my work very stimulating and pleasant during the year. They have too, owing to their enthusiasm and research been able to contribute several original articles of considerable value to the medical press.

The services of the Visiting Medical and Surgical Staff and Specialists have been utilised to the full and their opinions and work have been very useful in helping to elucidate difficult cases, also Dr. Ward, our Pathologist should have special mention as much of the success of keeping the Hospital up to date is largely due to his work.

The work of the Hospital has been carried on smoothly and amicably. The staff have not spared themselves in the interests of their patients, proof of which are the numerous letters of appreciation which are constantly being received from patients and their friends expressing their gratitude and thanks.

Special thanks are due to the help given to the Staff by the St. John Ambulance Cadets in the wards and particularly to Mrs. York and Miss Goddard and their helpers who give so much of their valuable time in organising and distributing books to the patients from the Hospital Library.

I should like to call attention to the Special Departments: Rheumatic Wards—Orthopaedic Wards—Phthisical Wards which have been constantly full.

The Pathological department, too, has been exceptionally busy; the expansion of this department is now definitely being prevented owing to lack of accommodation.

Three wards of the Hospital have now been divided into cubicles; this departure has been such a success that the Committee favour



having some more wards divided up in this way in the near future.

The Dental Department has now been running for a complete year under the able direction of Mr. John A. T. Rowlett, L.D.S. (Eng.). It has supplied a need which has been felt for a number of years.

I can only conclude by thanking the Hospital Sub-Committee for the interest and support which they are always willing and do give to the officials and officers which may in any way enhance the value of the Hospital for the sick. It is, I am sure, realised that this is the one and only objective before them all, no matter how remote some of the problems before them seem to be from this desideratum.

## I. Medical Staff.

### (a) Resident :—

Ernest Cutcliffe Hadley, M.D., B.S. (Lond.), F.R.C.S. (Edin.),  
M.R.C.S. (Eng.), L.R.C.P. (Lond.)

*Medical Superintendent, General Surgeon and Electrocardiologist.*

Alfred Patrick Menzies Page, M.D., B.S. (Lond.) M.R.C.P. (Lond.) D.C.H.  
(R.C.P. & S.)

*Deputy Medical Superintendent.*

Kenneth Garrat Seager, M.B., B.S. (Lond.), M.R.C.S. (Eng.)  
L.R.C.P. (Lond.)

Rowland E. M. Fawcett, M.B., B.S. (Lond.), M.R.C.S. (Eng.)  
L.R.C.P. (Lond.)

John Muir Brown, M.B., Ch.B. (Glasgow)

Allan William Abramson, M.B. (Camb.) B.chir.,  
M.R.C.P. (Lond.)

} *Resident  
Medical  
Officers.*

### (b) Visiting :—

John Vernon Braithwaite, M.D., B.S. (Lond.), F.R.C.P. (Lond.)

Ronald McDonald Cairns, M.D., Ch.B. (Edin.)

*Physicians.*

John Puxley White Jamie, M.A., M.D. (Camb.) B.Ch.

*Cardiologist.*

Thomas Charles Clare, M.D. (Lond.), F.R.C.S. (Eng.), F.C.O.G.

*Gynaecological Surgeon.*

Leslie Morris, M.D., Ch.B. (Manchester), F.R.C.S. (Eng.)

*Orthopaedic Surgeon.*

Ernest Reginald Frizelle, M.Ch., M.B., B.Ch., B.A.O. (Belfast), F.R.C.S. (Edin.)

*General Surgeon.*

Nicholas Edward Kendall, F.R.C.S. (Edin.)

*Aural Surgeon.*

David Forbes Lawson, M.A. (Camb.), M.B., B.Ch., M.R.C.S. (Eng.),

L.R.C.P. (Lond.), D.M.R.E.

*Radiologist.*

Frederick Alexander Silcock, M.D., B.Ch., B.A.O. (Belfast), D.P.H.  
*Skin Specialist.*

Arthur Llewellyn McCurry, M.D., B.Ch., B.A.O. (Belfast), D.O.M.S. (Eng.)  
*Eye Specialist.*

Charles Hamilton Wilkie, B.Sc. (Glas.), M.B., Ch.B.  
*Venereologist.*

Ernest Milford Ward, M.D., B.S. (Lond.), M.R.C.S. (Eng.), L.R.C.P. (Lond.)  
*Pathologist.*

David Justin Davies, M.B., B.S. (Lond.), D.A. (Eng.)  
Beryl Mary Mason, M.R.C.S. (Eng.), L.R.C.P. (Lond.)  
*Anaesthetists.*

John A. T. Rowlett, L.D.S. (Eng.)  
*Dental Surgeon.*

## II. Resident Nursing Staff.

- (a)
- 1 Matron.
  - 1 1st Assistant Matron.
  - 1 2nd Assistant Matron.
  - 1 Sister Tutor.
  - 1 Home Sister.
  - 1 Sister Housekeeper.
  - 1 Night Superintendent.
  - 1 Assistant Night Superintendent.
  - 1 Theatre Sister.
  - 1 Maternity Sister.
  - 8 Ward Sisters.
  - 80 Probationer Nurses.
  - 13 Staff Nurses.

N.B.—Probationer Nurses are in training for four years, during which time they are expected to pass the Preliminary and Final State Examinations, and also that of the Central Midwives Board. The remainder of the Resident Nursing Staff are all fully qualified Registered Nurses and in most cases hold the C.M.B. Certificate.

### (b) *Non-Resident Nursing Staff.*

- 1 Head Orthopaedic Sister.
- 2 Orthopaedic Ward Sisters.
- 4 Ward Sisters.
- 3 Staff Nurses.
- 5 Male Probationers.
- 8 Male Attendants.

## III. Other Non-Resident Staff :

- 1 Radiographer.
- 2 Masseuses.
- 1 Dispenser.
- 3 Teachers for City General Hospital School.
- 2 Laboratory Assistants.
- 2 Barbers.
- 1 Head Laundress.

**IV. Resident Domestic Staff.**

1 Cook.  
2 Assistant Cooks.  
14 Maids.

**Total Resident Staff.**

134

---

**Visiting Staff.**

**Attendances during the year of the Visiting Staff :—**

2 Visiting Physicians	..	..	..	..	..	133
2 Visiting Anaesthetists	..	..	..	..	..	147
1 Consultant Venereal Diseases Specialist				..	..	13
1 „ Eye Specialist			..	..	..	15
1 „ Ear, Nose and Throat Specialist				..	..	23
1 „ Skin Specialist		..	..	..	..	15
1 „ Radiologist	..	..	..	..	..	54
1 „ Gynaecologist		..	..	..	..	25
1 „ Surgeon	..	..	..	..	..	41
1 „ Cardiologist	..	..	..	..	..	18
1 „ Dental Surgeon		..	..	..	..	24
						<hr/> 508 <hr/>

**Specialised Services supplied by the Hospital :—**

1. Orthopaedic.
2. Massage and Ultra-Violet Light Treatment.
3. X-ray.
4. Ante-natal Clinic.
5. Maternity.
6. Venereal Disease.
7. Anaesthetists.
8. Rheumatism, Chorea and Heart Cases.
9. City General Hospital Council School.
10. Gynaecological.
11. Dental.

**Accommodation provided by the Hospital.**

	Excluding Balcony Beds (which are not recognised as Permanent Accom- modation).	Including Balcony Beds.
(a) For Men ..	190	227
(b) For Women	211	260
(c) For Children	96	146
Total	<hr/> 497	<hr/> 633

## TUBERCULOSIS REPORT.

### Number of Beds available for the treatment of Tuberculosis.

For Pulmonary Cases	..	..	..	60 Adults
For Non-Pulmonary Cases	..	..	..	31 Adults
				31 Children

Total .. 122

### Return showing the Extent of Residential Treatment during the Year.

	Re- maining 1.1.37	Ad- mitted during year	Dis- charged	Died	Re- maining 31.12.38
Number of Patients suffer- ing from Pulmonary Tuberculosis :—					
Men .. ..	37	104	73	36	32
Women .. ..	27	55	48	18	16
Children .. ..	1	3	2	1	1
Total .. ..	65	162	123	55	49
Number of Patients suffer- ing from Non-Pulmonary Tuberculosis :—					
Men .. ..	6	42	39	2	7
Women .. ..	5	27	24	1	7
Children .. ..	31	37	46	1	21
Total .. ..	42	106	109	4	35
GRAND TOTAL ..	107	268	232	59	84

### Summary of Tuberculosis Cases discharged and died—showing those cases also whose period of Residential Treatment was under 28 days.

Pulmonary Tuberculosis	Discharged				Died		
	Length of Stay	Male	Female	Children	Male	Female	Children
Non-Pulmonary Tuberculosis	Over 28 days ..	54	38	2	14	12	1
	Under 28 days	20	10	—	21	6	—
	Total .. ..	74	48	2	35	18	1
	Over 28 days ..	27	18	37	1	—	2
	Under 28 days	12	7	9	2	1	1
	Total .. ..	39	25	46	3	1	3



TUBERCULOSIS RETURN FOR 1938.

Condition at time of discharge			Duration of Residential Treatment in Institution.															TOTALS.			GRAND TOTALS.
			* Under 28 days.			28 days-3 months.			3-6 months.			6-12 months.			Over 12 months.						
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	T.B.—	Quiescent	8	2	—	3	2	—	4	4	—	—	4	—	2	—	—	17	12	—	29
		Non-Quies.	—	—	—	2	—	—	1	—	—	—	—	—	—	—	—	3	—	—	3
		Died in Inst.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
	T.B.+I.	Quiescent	—	1	—	—	—	—	1	1	—	—	—	—	—	—	—	1	2	—	3
		Non-Quies.	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
		Died in Inst.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
	T.B.+II.	Quiescent	4	1	—	9	1	—	7	4	1	7	3	—	1	2	—	28	11	1	40
		Non-Quies.	3	4	—	5	4	—	1	2	—	1	—	1	—	—	—	10	10	1	21
		Died in Inst.	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2
	T.B.+III.	Quiescent	1	1	—	1	—	—	2	1	—	1	—	—	—	—	—	5	2	—	7
		Non-Quies.	3	1	—	4	1	—	1	4	—	1	4	—	—	—	—	9	10	—	19
		Died in Inst.	19	6	—	9	5	1	2	5	—	1	1	—	1	1	—	32	18	1	51
Total of Pulmonary ..			39	16	0	34	13	1	19	21	1	11	13	1	4	3	0	107	66	3	176
NON-PULMONARY TUBERCULOSIS	Bones and Joints.	Quiescent	11	4	8	5	3	7	3	1	7	8	2	6	3	2	5	30	12	33	75
		Non-Quies.	—	—	—	—	—	—	—	1	3	—	—	—	—	—	2	—	1	5	6
		Died in Inst.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
	Abdominal.	Quiescent	—	—	—	1	—	3	—	1	—	—	—	—	—	—	—	1	1	3	5
		Non-Quies.	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
		Died in Inst.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
	Other Organs.	Quiescent	—	1	—	3	1	1	1	2	1	—	2	—	—	—	—	4	6	2	12
		Non-Quies.	—	—	—	1	—	—	—	1	1	—	—	—	—	—	—	1	1	1	3
		Died in Inst.	1	—	1	—	—	2	—	—	—	1	—	—	—	—	—	2	—	3	5
	Peripheral Glands.	Quiescent	—	1	—	—	2	—	1	—	1	—	—	—	—	—	—	1	3	1	5
		Non-Quies.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	2
		Died in Inst.	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Total of Non-Pulmonary ..			14	7	10	11	6	13	5	6	13	9	4	6	3	2	7	42	25	49	116

\* Figures in this column have been excluded from Ministry of Health Returns, but are given here for comparison.

**Classification of Accommodation showing, also, number of beds occupied on December 31st, 1938, i.e., approximate average number of beds occupied on various Wards.**

Classification of Wards.	No. of Wards	BEDS.							
		Men.		Women.		Children.		Total.	
		Provided.	Occupied.	Prov.	Occ.	Prov.	Occ.	Prov.	Occ.
1. Medical ..	2	32	26	31	28	—	5	63	59
2. Surgical ..	2	32	23	28	20	—	3	60	46
3. Chronic Sick	2	31	15	32	31	—	—	63	46
4. Children ..	1	—	—	—	—	32	38	32	38
5. Venereal ..	Part of Med.Wds.								
6. Tuberculosis	2	32	32	28	14	—	—	60	46
7. Isolation ..	—	—	—	—	—	—	—	—	—
8. Maternity ..	1	—	—	29	26	—	—	29	26
9. Mental ..	—	—	—	—	—	—	—	—	—
10. Orthopædic ..	2	31	12	31	8	—	29	62	49
11. Rheumatic and Heart ..	2	—	—	—	1	64	28	64	29
12. Gynæcological	1	—	—	32	20	—	2	32	22
Wards vacant	1	32	—	—	—	—	—	32	—
Totals ..	16	190	108	211	148	96	105	497	361
N.B. This return corresponds with that submitted to the Ministry of Health								Babies in Maternity Ward 24	
								Grand	
								Total 385	

**GENERAL STATISTICS.**

	1937	1938
Admissions .. .. .	4,065	4,182
Discharges .. .. .	3,378	3,663
Deaths .. .. .	676	561
Deaths occurring within seven days of admission .. .. .	284	262
Number of Patients Days .. ..	157,942	154,685
Average duration of residence (in days) ..	46.7	36.98
Average number of beds occupied ..	432.72	422.699
Highest—On 15. 1.37 .. .. .	528	—
On 11. 5.38 .. .. .	—	523
Lowest—On 22. 8.37 .. .. .	389	
On 23.10.38 .. .. .	—	330
Post Mortem Examinations held ..	267	232
Inquests held .. .. .	17	27
Operations performed .. .. .	768	966
Dental extractions .. .. .	—	164
Blood Transfusions given .. ..	11	54

GENERAL STATISTICS— <i>continued</i>				1937	1938
X-Ray films exposed	..	..	..	3,669	4,397
Electrocardiographic Examinations	..			182	155
Confinements	..	..	..	339	552
Laboratory figures :—					
Pathological Investigations	..	..		6,486	8,521
Serological Examinations for V.D.				596	2,616

#### SUMMARY OF YEARLY RETURN OF CASES.

	Remaining on 31/12/37	Admitted	Discharged	Died	Remaining on 31/12/38
Men .. ..	120	1067	786	286	115
Women ..	160	1801	1614	197	150
Children (under 16 years) ..	147	1314	1263	78	120
Totals .. ..	427	4182	3663	561	385

#### Transfers from other Institutions and Cases sent in by other Local Authorities.

Leicester Royal Infirmary	..	..	..	..	34
Groby Road Hospital	..	..	..	..	47
Westcotes Maternity Hospital	..	..	..	..	27
School Medical Service	..	..	..	..	75
County Health Department	}	..	..	..	42
County Public Assistance					
City Mental Hospital	..	..	..	..	1
Markfield Sanatorium	..	..	..	..	1

#### STATISTICAL TABLE.

Showing progress in Special Departments in the past 8 years.

	1931	1932	1933	1934	1935	1936	1937	1938
Admissions ..	2,329	2,471	2,685	2,878	2,801	3,357	4,065	4,182
Average stay in Hospital	53	49.6	64.2	54.3	52.5	47	46.7	36.98
days		days	days	days	days	days	days	days
Confinements	127	145	134	205	231	222	339	552
Operations Performed ..	170	136	188	223	351	602	768	1,130
X-Ray Films Exposed ..	607	1,092	2,182	3,397	3,175	3,792	3,667	4,397
Pathology ..	Nil.	1,274	1,828	2,850	5,011	7,247	6,486	8,521



# OPERATION TABLE.

## GENERAL SURGERY CLASSIFIED.

Class of Case.	Operation under G.A.	No. Performed.
<b>I. Abdominal Operations</b>	Appendicectomy .. .. .	38
	Caecostomy .. .. .	2
	Cholecystectomy .. .. .	2
	Cholecysto-gastrostomy .. .. .	1
	Choledochotomy .. .. .	2
	Colostomy .. .. .	8
	Exploratory Laparotomy .. .. .	14
	Gastro-enterostomy .. .. .	7
	For Femoral Hernia .. .. .	3
	„ Inguinal Hernia .. .. .	18
	„ Double Inguinal Hernia .. .. .	2
	„ Strangulated Hernia .. .. .	3
	„ Ventral Hernia .. .. .	6
	„ Intestinal Volvulus .. .. .	1
	„ Intussuseption .. .. .	1
	„ Perforated Gastric Ulcer .. .. .	4
	Rammstedt's Operation .. .. .	1
	Sigmoidoscopy .. .. .	4
		—
		117
		—
<b>II. Kidney and Genito-Urinary</b>	Circumcision .. .. .	3
	Cystoscopy .. .. .	22
	Cystostomy .. .. .	15
	Nephrectomy .. .. .	4
	Nephrolithotomy .. .. .	3
	Orchidectomy .. .. .	5
	Peri-renal Abscess .. .. .	1
	Prostatectomy .. .. .	4
	Pyelogram .. .. .	6
	Ureterectomy .. .. .	1
	Ureterolithotomy .. .. .	1
	For Urethral Caruncle .. .. .	1
	„ Urethral Stricture .. .. .	5
	„ Varicocele .. .. .	1
		—
		72
		—
<b>III. Respiratory</b>	For Empyema .. .. .	12
	Endotracheal Lipiodol Injection .. .. .	1
	Rib Resection (Sub-phrenic abscess)	1
	Thoracotomy .. .. .	1
		—
		15
		—



OPERATION TABLE—continued.

Class of Case.	Operation under G.A.	No. Performed.
IV. Bones	Amputation of Toe .. ..	5
	„ Leg .. ..	4
	„ Symes .. ..	2
	For Melanotic Sarcoma .. ..	1
	„ Osteomyelitis of Jaw .. ..	1
	Plasters .. ..	9
		— 23 —
V. Ear, Nose, Throat and Eye	Bi-lateral Myringotomy .. ..	3
	Dissection of Tonsils .. ..	4
	Excision of Cervical Glands .. ..	1
	Exploration of Frontal Sinus .. ..	2
	Exploration of Mastoid .. ..	1
	Fixation of Eyelid .. ..	1
	For Nasal Polypi .. ..	1
	Mastoidectomy .. ..	8
	Sub-total Thyroidectomy .. ..	6
	For Tonsils and Adenoids .. ..	9
		— 38 —
VI. Gynaecological	Abscess of Breast .. ..	13
	Amputation of Breast .. ..	3
	For Atresia Vaginalis .. ..	1
	Caesarian Section .. ..	14
	Caesarian Section and Sterilization .. ..	1
	Cauterization of Cervix .. ..	1
	Colpoperineorrhaphy .. ..	4
	Colporrhaphy .. ..	3
	Craniotomy .. ..	1
	Dilatation and Curettage .. ..	35
	Enucleation of Bartholin's Cyst .. ..	1
	Evacuation of Hydatidiform Mole .. ..	1
	Evacuation of Uterus .. ..	16
	Examination under Anaesthetic .. ..	3
	Hysterectomy .. ..	3
	Myomectomy .. ..	1
	Ovariectomy .. ..	3
	Perineorrhaphy .. ..	3
	For Placental Polypus and Cervical Fibroid .. ..	1
	Salpingo-oophorectomy .. ..	1
	Sterilization .. ..	1
	Surgical Induction of Labour .. ..	22
	For Uterine Polypus .. ..	2
	Ventropexy .. ..	1
		— 135 —

# OPERATION TABLE—continued.

Class of Case.	Operation under G.A.	No. Performed.
VII. Miscellaneous	Abscess .. .. .	36
	Biopsy .. .. .	5
	Blood Transfusions .. .. .	54
	For Bursitis .. .. .	2
	„ Cellulitis of Arm .. .. .	1
	Cisternal Punctures .. .. .	3
	Excision of Naevus .. .. .	1
	For Fistula in Ano .. .. .	3
	Haemorrhoidectomy .. .. .	5
	For Imperforate Anus .. .. .	1
	Injection of Gasserian Ganglion .. .. .	1
	Ischio-rectal Abscess .. .. .	5
	For Prolapse of Rectum .. .. .	2
	Reduction of Dislocated Shoulder .. .. .	2
	„ „ Thumb .. .. .	1
	Removal of Nail .. .. .	2
	For Removal of Sebaceous Cyst of Scalp .. .. .	1
	Special Theatre Dressings .. .. .	11
		—
		136
		—
	Total Number of General Operations	536
		—
	Dental Extractions .. .. .	164

## ORTHOPAEDIC OPERATIONS.

Abscesses .. .. .	22
Amputations .. .. .	6
Arthrodesis .. .. .	4
Bone Graft : Albee Spinal .. .. .	3
Thumb, etc. .. .. .	4
Correction of Hammer Toe .. .. .	6
„ Deformity of Feet .. .. .	12
„ Rachitis .. .. .	5
Division of Hamstrings .. .. .	7
Dressings, etc., under General Anaesthetic .. .. .	9
„ Winnett Orr .. .. .	47
Laminectomy .. .. .	2
Manipulations .. .. .	9





## LABORATORY REPORT FOR 1938.

By

E. MILFORD WARD, M.D. (Lond.)

The Laboratory at the City General Hospital has had a record year in the number of investigations carried out—the total reaching 8,521, an increase of 25 per cent. on the total of 1937.

The provision of a fume cupboard attached to the outside of one of the windows has been of considerable service. We realise that this is merely a temporary fixture but it has enabled us to carry out certain biochemical investigations which had previously to be done elsewhere. This laboratory, together with the laboratory at the Isolation Hospital now makes the pathological department a complete self-contained unit.

A second addition to the Laboratory is proving of extreme worth—an air-damped Balance weighing to .0001 gram. which dispenses with all weights below 100 mg. This Balance comes to rest within four seconds and is very pleasant to use. We are awaiting the provision of a shock-proof bench for this piece of apparatus.

It was mentioned in last year's report that an investigation in the cause of death in Pneumonia was being carried out. A paper incorporating this research is now awaiting publication. The main point upon which interest was placed was upon the Specific Gravity of the Blood in Pneumonia. Fifty-four cases were studied with a mortality rate of 29.5 per cent. in the whole series. It was discovered that with a Blood Specific Gravity below 1060, 12 per cent. only of the patients were classified as seriously ill, whilst with a figure over 1060, 68 per cent. were serious or fatal. With a Blood Specific Gravity of below 1060 the mortality rate was 20 per cent., with a Blood Specific Gravity of over 1062, the mortality rate rose to 83 per cent.

It was considered, therefore, that this haemoconcentration was an important factor in the causation of peripheral circulatory failure and death in Pneumonia.

Further work on this subject is being carried out this winter but it appears at the moment that the introduction of the new drug (M & B 693) for the treatment of Pneumonia is altering the outlook so considerably (in our present series of cases the mortality rate is only 8 per cent.), that it will be difficult to come to any definite conclusions.

It will be noticed in the general figures that the number of Blood Transfusions has risen very considerably during the present year. We have been using two sources of supply. The first is the City of Leicester Blood Transfusion Service. The help of the Rover Scouts has been elicited and the Old Wyggestonian Association has also been of considerable assistance, so that we now have at our disposal sufficient donors to make a Blood Transfusion Service a workable proposition. Further volunteers will, of course, be welcomed.

The second source of supply which has been investigated is Placental Blood. A paper recounting our experience with this blood has been published. (*Lancet.* I. 1939. 200.)

It will suffice to say that we are of the opinion that this is a safe and reliable source of blood if the collecting of the samples is under adequate control.

A note on the Venereal Disease pathology will be found in the Laboratory report of the Isolation Hospital.

The senior Laboratory technician, Mr. E. L. Cridland, has obtained, during the year, the Bacteriological Certificate of the Pathological and Bacteriological Laboratory Assistants' Association.

The present Laboratory accommodation precludes any addition to the full Laboratory staff, but the part time services of a clerk would be greatly appreciated and would be of considerable assistance.

LABORATORY REPORT.

Haematology

Blood Counts (Complete)	..	..	..	..	..	391
„ „ (White)	..	..	..	..	..	411
„ „ (Red)	..	..	..	..	..	344
„ „ (Reticulocytes or Platelet)	..	..	..	..	..	58
„ Grouping	..	..	..	..	..	102
„ Coagulation or Bleeding Time	..	..	..	..	..	3
„ Fragility	..	..	..	..	..	5
„ Cell Volume	..	..	..	..	..	16
„ Viscosity	..	..	..	..	..	263
„ Price Jones' Curve	..	..	..	..	..	1
						1,594

## Bacteriology

Blood for Culture .. .. .	114
Throat Swabs for K.L.B. (Some Aural and Nasal) .. ..	466
Throat Swabs for Haem. Strepts., etc. .. ..	220
Swabs for G.C., etc. .. ..	144
Pus, Pleural Fluids, etc., for culture .. ..	174
Sputum for T.B. .. ..	948
Sputum for Typing of Pneumococci .. ..	70
Urine for T.B. .. ..	78
Faeces for T.B. .. ..	25
Faeces for Organisms .. ..	24
Specimens for culture for T.B. .. ..	44
Cough Plate for Pertussis.. ..	16
	<hr/>
	2,323
	<hr/>

## Biochemistry

Blood Bicarbonate.. .. .	16
„ Calcium .. ..	8
„ Cholesterol .. ..	8
„ Chloride .. ..	147
„ Phosphorus.. ..	1
„ Protein .. ..	5
„ Sugar Tolerance Curve .. ..	28
„ Sugar (Single Estimation) .. ..	57
„ Urea .. ..	247
„ Urea Clearance .. ..	21
„ Uric Acid .. ..	2
„ for Van den Bergh Test, Icterus Index .. ..	32
„ Andrew's Reaction .. ..	6
„ Serum Sodium .. ..	34
Fractional Test Meals .. ..	64
Urine for Urea Concentration .. ..	39
„ for Chloride Estimation .. ..	173
„ Sodium .. ..	7
Faeces for Fat .. ..	3
Basal Metabolic Rate .. ..	16
	<hr/>
	914
	<hr/>

## Histology

Microtome Sections .. ..	234
--------------------------	-----



**Clinical Pathology**

Blood for Sedimentation Rate	..	..	..	..	..	1,614
„ Specific Gravity	..	..	..	..	..	305
„ Spectroscopic Examination	..	..	..	..	..	2
Cerebro-Spinal Fluid (complete) ..	..	..	..	..	..	184
Sputum for Organism, cells, etc.	..	..	..	..	..	94
Urine for p.H. Estimation	..	..	..	..	..	121
„ for Microscopical Examination	..	..	..	..	..	289
„ for Microsc. Examination and Culture	..	..	..	..	..	511
„ for Micro. Chemical Exam. and Culture	..	..	..	..	..	69
Faeces for Occult Blood and Parasites	..	..	..	..	..	77
Urinary Specific Polysaccharides	..	..	..	..	..	5
Vaccines Prepared	..	..	..	..	..	7
Stomach Lavage contents ..	..	..	..	..	..	11
Miscellaneous	..	..	..	..	..	15
						3,304
Post Mortem Examinations	..	..	..	..	..	232

**EXAMINATIONS OTHER THAN FOR THE CITY GENERAL HOSPITAL.**

Conducted in the City General Hospital Laboratory.

**Isolation Hospital.**

Blood Urea	..	..	..	..	..	..	..	4
,, Count	..	..	..	..	..	..	..	6
,, Sugar	..	..	..	..	..	..	..	5
,, Sulphaemoglobin			..	..	..	..	..	3
Van den Bergh	..	..	..	..	..	..	..	8
Icterus Index	..	..	..	..	..	..	..	3
Cerebro-Spinal Fluid		..	..	..	..	..	..	32
Blood Sedimentation Rate and Cell Volume						..	..	2
Fractional Test Meals		..	..	..	..	..	..	5
Blood Urea Clearance		..	..	..	..	..	..	3
Pleural Fluid	..	..	..	..	..	..	..	2
Urine	..	..	..	..	..	..	..	2
Microtome Sections		..	..	..	..	..	..	12
								87

**Westcotes Maternity Home**

Blood Counts	..	..	..	..	..	..	5
„ Urea Clearance		..	..	..	..	..	1
„ Sulphaemoglobin			..	..	..	..	1
Van den Bergh	..	..	..	..	..	..	1
Icterus Index	..	..	..	..	..	..	1
Urine	..	..	..	..	..	..	1
Microtome Sections		..	..	..	..	..	2
							—
							12
							—

### Infant Welfare Centre and School Clinic.

Blood Count	..	..	..	..	..	..	..	1
„ Coagulation or bleeding time	..	..	..	..	..	..	..	2
„ Platelets	..	..	..	..	..	..	..	1
Microtome Sections	..	..	..	..	..	..	..	1

---

5

### Various

Blood Count	..	..	..	..	..	..	..	9
„ Count (Reticulocyte)	..	..	..	..	..	..	..	2
„ Count (White)	..	..	..	..	..	..	..	2
„ Urea	..	..	..	..	..	..	..	9
„ Grouping	..	..	..	..	..	..	..	4
„ Fragility	..	..	..	..	..	..	..	2
„ Sugar Curve	..	..	..	..	..	..	..	3
Van den Bergh	..	..	..	..	..	..	..	1
Blood Sedimentation Rate	..	..	..	..	..	..	..	2
Sputum for T.B.	..	..	..	..	..	..	..	1
Urine for Microscopical Examination	..	..	..	..	..	..	..	3
Cerebro-Spinal Fluid	..	..	..	..	..	..	..	1
Urea Concentration Test	..	..	..	..	..	..	..	1
Microtome Sections	..	..	..	..	..	..	..	5
Estimation of Germicidal Power of Zant	..	..	..	..	..	..	..	1
Faeces for Culture..	..	..	..	..	..	..	..	1
Examination of Tape Worm for Head	..	..	..	..	..	..	..	1

---

48

### EXAMINATIONS FOR CITY GENERAL HOSPITAL.

Conducted in Laboratories other than the City General Hospital.

#### Isolation Hospital.

Blood for Widal Reactions	..	..	..	..	..	..	..	27
„ for Wassermann Reactions	..	..	..	..	..	..	..	1,216
„ for Kahn Reactions	..	..	..	..	..	..	..	1,190
„ for C.D.T. (G.C.)	..	..	..	..	..	..	..	140
C.S.F. for Wassermann Reactions	..	..	..	..	..	..	..	70
Guinea Pig Inoculation for K.L.B. Virulence	..	..	..	..	..	..	..	50
Guinea Pig Inoculation for T.B...	..	..	..	..	..	..	..	39
C.D.T. (T.B.)	..	..	..	..	..	..	..	27
Sputum for Mouse Inoculation and Type of Pneumo.	..	..	..	..	..	..	..	28

---

2,787

#### Edinburgh University (Pregnancy Diagnosis Laboratory).

Ascheim Zondek Reactions	..	..	..	..	..	..	..	19
--------------------------	----	----	----	----	----	----	----	----

#### St. Thomas' Hospital.

C.S.F. for Wassermann Reactions	..	..	..	..	..	..	..	3
Blood for Wassermann and Kahn Reactions	..	..	..	..	..	..	..	1

#### School of Tropical Medicine and Hygiene.

C.D.T. (Hydatid)	..	..	..	..	..	..	..	1
------------------	----	----	----	----	----	----	----	---

## MATERNITY DEPARTMENT.

There was a 63 per cent. increase in the number of confinements during 1938, the total being 552. Of these, 23 were transferred from Westcotes Maternity Home, including eight women in labour, who required surgical attention.

The Ante-natal attendances have also shown a marked increase, although no figures are available for comparison; the number of expectant mothers examined being 489, and the total number of attendances 2,175.

Number of Maternity Beds provided .. .. .	29
„ Cases admitted during the year .. .. .	552
Average duration of stay .. .. .	13 days
Number of Cases delivered by Midwives .. .. .	472
„ „ by Doctors .. .. .	80
Number of Cases in which Medical Assistance was sought ..	171
Cases notified as Puerperal Pyrexia .. .. .	4
„ „ Ophthalmia Neonatorum .. .. .	5
Maternal Deaths .. .. .	0
Infant Deaths in Children born in Hospital .. .. .	21
Stillbirths .. .. .	30
Percentage of Stillbirths to Live Births .. .. .	5.43
Transfers from Westcotes Maternity Home, Mothers.. ..	23
„ „ „ Infants .. .. .	4

### Infant Deaths.

Spina Bifida .. .. .	2
Prematurity .. .. .	13
Anencephaly .. .. .	2
Haemorrhage into Adrenals .. .. .	1
Neonatal Infantile Convulsions .. .. .	1
Insufficient Vitality at Birth .. .. .	2
	—
	21
	—

### Operative Midwifery.

Application of Forceps .. .. .	48
Caesarian Section .. .. .	15
Adherent Placenta (Manual removal) .. .. .	4
Manual delivery of Complicated Breech .. .. .	6
„ „ Transverse .. .. .	1
„ „ Impacted Shoulder .. .. .	2
Surgical Inductions .. .. .	22
Episiotomies .. .. .	20
Repair of Perineal Lacerations, Grade 1 .. .. .	39
„ „ „ Grade 2 .. .. .	34
Repair of torn Cervix .. .. .	1
Perforation of Foetal Skull .. .. .	1
Embryotomy .. .. .	1
General Anaesthetics .. .. .	119
Local Anaesthetics.. .. .	61



**Abnormal or Complicated Cases.**

Twins .. .. .	10
Placenta Praevia .. .. .	6
Accidental Haemorrhage .. .. .	4
Pyelitis of Pregnancy .. .. .	25
Toxaemia of Pregnancy .. .. .	23
Eclampsia .. .. .	2
Mitral Stenosis .. .. .	2
Pulmonary Tuberculosis .. .. .	2
Disproportion .. .. .	19
Breech Presentation .. .. .	21
Face Presentation .. .. .	4
Shoulder Presentation .. .. .	3
Versions .. .. .	19
Prolapsed Cord .. .. .	1
Rigid Cervix .. .. .	1
Bartholin's Cyst .. .. .	1
Hydramnios .. .. .	1
Premature Labour .. .. .	16
Medical Inductions .. .. .	24

**INDICATIONS FOR WHICH CAESARIAN SECTIONS WERE PERFORMED.**

Indications.	Booked.	Emergency.	Total.
Disproportion .. .. .	4	5	9
Contracted pelvis and disproportion..	2	1	3
Contracted pelvis and breech ..	—	1	1
Mitral Stenosis and sterilisation ..	1	—	1
Eclampsia .. .. .	1	—	1
Totals .. .. .	8	7	15

**CLASSIFICATION OF CASES TREATED DURING 1938**  
**From January 1st to December 31st**  
**and DISCHARGED.**

*MEDICAL CASES.*

**I. General Infections.**

Actinomycosis .. ..	1	Pyæmia, Pneumococcal ..	1
Anterior Poliomyelitis .. ..	9	Rheumatism, Acute .. ..	58
Chorea .. ..	41	"    Subacute .. ..	25
Diphtheria .. ..	19	Scarlet Fever .. ..	2
Diphtheria Carrier .. ..	2	Septicæmia, General .. ..	2
Diphtheritic Debility .. ..	1	"    Pneumococcal .. ..	1
Erysipelas .. ..	15	"    Staphylococcal ..	3
Influenza .. ..	6	"    Streptococcal .. ..	4
Measles .. ..	2	Typhoid .. ..	1
Measles, German .. ..	1	Varicella .. ..	1
Military Tuberculosis .. ..	2		
Mumps .. ..	2		210
Pertussis .. ..	11		----

**II. Respiratory Disorders.**

Asthma, Bronchial .. ..	25	Pleural Effusion .. ..	28
"    Cardiac .. ..	3	Pleurisy .. ..	7
"    Hysterical .. ..	1	Pleurisy with Effusion	
"    Renal .. ..	1	(Tuberculous) .. ..	6
Atelectasis of Lung .. ..	2	Pleurodynia .. ..	2
Bronchiectasis .. ..	16	Pneumonia, Broncho .. ..	65
Bronchitis, Acute .. ..	36	"    Hypostatic .. ..	6
"    Chronic .. ..	50	"    Influenzal .. ..	1
Carcinoma of the Bronchus ..	12	"    Lobar .. ..	163
"    "    Mediastinum ..	1	"    Unresolved .. ..	1
Catarrh .. ..	1	"    Streptococcal .. ..	1
Catarrh, Pulmonary .. ..	1	Pneumonitis .. ..	4
Collapse of Lung, Chronic ..	1	Pneumothorax, Spontaneous ..	1
Coryza .. ..	3	Pulmonary Oedema .. ..	3
Emphysema .. ..	1	"    Tuberculosis .. ..	189
Endothelioma of Pleura .. ..	1	Epituberculosis of Lungs ..	1
Fibrosis of the Lung .. ..	3	Respiratory Failure .. ..	1
Fibrosis of Lung (Syphilitic)	1	Syphilis of Lung .. ..	1
Haemoptysis .. ..	5		
Infarction of Lung .. ..	1		645

**III. Diseases of Heart and Circulation.**

Aneurysm of the Aorta .. ..	4	Endocarditis, Meningococcal ..	1
Angina Pectoris .. ..	1	"    Rheumatic .. ..	5
Aortic Atheroma .. ..	1	"    Subacute Infective ..	9
"    and Mitral Incompetence	4	Femoral Thrombosis .. ..	2
"    Regurgitation .. ..	5	Heart Block .. ..	1
Aortitis, Syphilitic .. ..	7	Hyperpiesia .. ..	39
Arteriopathic Senile Dementia	1	Hypertension, Essential .. ..	9
Arterio Sclerosis .. ..	23	Mitral Stenosis .. ..	23
Auricular Fibrillation .. ..	79	Myocardial Degeneration .. ..	19
Bi-lateral Arterial Embolism ..	1	"    Insufficiency .. ..	1
Cardiac Failure .. ..	11	Myocarditis .. ..	64
Cardio Renal Heart Failure ..	1	"    Syphilitic .. ..	1
Carditis, Ac. Rheumatic .. ..	40	Pericarditis .. ..	6
Cavernous Sinus Thrombosis ..	1	Pericardial Effusion .. ..	1
Congestive Heart Failure .. ..	4	Post Operative Haemorrhage ..	1
Congenital Heart Disease .. ..	2	Tachycardia .. ..	5
Coronary Sclerosis .. ..	5		
"    Thrombosis .. ..	12		379

#### IV. Nervous Diseases.

Amyotonia Atrophica ..	1	Meningitis, Influenzal ..	1
Amytrophic Lateral Sclerosis ..	5	„ Meningococcal ..	6
Amyotrophy, Syphilitic ..	1	„ Pneumococcal ..	4
Angio Neurotic Oedema and		„ Serous ..	3
Migraine .. ..	1	„ Tuberculous ..	2
Cerebellar Abscess .. ..	1	Migraine .. ..	2
Cerebral Arterial Sclerosis ..	1	Muscular Atrophy .. ..	2
„ Congestion .. ..	1	Myoclonus .. ..	1
„ Embolism .. ..	1	Nervous Debility .. ..	2
„ Haemorrhage .. ..	12	Nerve Palsy, 3rd .. ..	1
„ Oedema .. ..	1	Neuralgia .. ..	2
„ Softening .. ..	1	Neuritis .. ..	3
„ Thrombosis .. ..	41	Neuritis, Diabetic .. ..	1
„ Tumour .. ..	3	„ Peripheral .. ..	1
Convulsions .. ..	1	Neuro Syphilis .. ..	1
Convulsions, Neonatal Infantile	1	Parkinsonism .. ..	6
Disseminated Sclerosis ..	6	„ Post Encephaletic	2
Encephalitis Lethargica ..	2	Pseudo-Hypertrophic Muscular	
Epilepsy .. ..	19	Dystrophy .. ..	1
Functional Inability to Walk ..	1	Sciatica .. ..	5
Gumma of Brain .. ..	1	Spastic Paralysis .. ..	4
Hemiplegia .. ..	6	Status Epilepticus .. ..	1
Herpes Zoster .. ..	4	Sub-Acute Combined	
Huntingdon's Chorea .. ..	1	Degeneration .. ..	2
Hydrocephalus .. ..	1	Sub-Arachnoid Haemorrhage	4
Hyperchondriasis .. ..	1	Subdural Haemorrhage ..	1
Hysterical Hypernoea .. ..	1	Syringomyelia .. ..	2
Intracranial Haemorrhage ..	1	Tabo-Paresis .. ..	1
Little's Disease .. ..	1	Vertigo .. ..	1
Meniere's Syndrome .. ..	1	Pontine Haemorrhage ..	1
Meningioma .. ..	1		
Meningismus .. ..	1		183

#### V. Mental Disorders.

Acute Agitative Melancholia ..	1	Kleptomania .. ..	1
Arteriopathic Senile Dementia	1	Korsakow's Syndrome ..	1
Attempted Suicide .. ..	3	Malingering .. ..	6
Confusion, Acute .. ..	1	Mania .. ..	2
Degeneration of Basal Nuclei		Melancholia .. ..	5
of Brain .. ..	1	Mental Deficiency .. ..	11
Delusional Psychosis .. ..	1	Mongolism .. ..	1
Dementia .. ..	4	Neurasthenia .. ..	17
„ Alcoholic .. ..	1	Psychosis, Paranoid .. ..	1
„ Senile .. ..	5	„ Puerperal .. ..	3
Dipsomania .. ..	1	Psycho Neurosis .. ..	21
General Paralysis of the Insane	5	Psychosis, Senile .. ..	1
Hysteria .. ..	3	Schizophrenia .. ..	4
Insanity .. ..	14		
Insomnia .. ..	1		116

#### VI. Metabolic and Endocrinal Disorders.

Acidosis .. ..	4	Infiltration of Thyroid Gland	1
Carcinoma of the Thyroid		Myxoedema .. ..	2
Gland .. ..	1	Pink Disease .. ..	2
Carotinaemia .. ..	1	Simple Goitre .. ..	1
Diabetic Gangrene .. ..	8	Supra Renal Haemorrhage ..	1
Diabetes Insipidus .. ..	3	Tetany .. ..	1
Diabetic Ketosis .. ..	2	Thyrotoxicosis .. ..	11
Diabetes Mellitus .. ..	59	Toxic Adenoma of Thyroid ..	2
Glycosuria .. ..	1		
Hodgkin's Disease .. ..	2		102



## VII. Nutritional and Congenital Defects.

Anencephaly .. .. .	1	Microcephaly .. .. .	1
Congenital Abnormalities of		Multiple Capillary Telangectasis	
Bile Ducts .. .. .	1	and Webbed Toes .. .. .	1
Congenital Double Thumb ..	1	Multiple Congenital Defects..	1
„ Syphilis .. .. .	1	Obesity .. .. .	2
„ Talipes Equino		Polydactyle Left Foot.. ..	1
Varus .. .. .	1	Prematurity .. .. .	31
Debility .. .. .	8	Rickets .. .. .	7
Fractiousness .. .. .	1	Senility .. .. .	20
Gangrene of Foot .. .. .	3	Spina Bifida .. .. .	3
Hydrocephalic Monstrosity ..	2	Tongue Tied .. .. .	1
Incomplete Hare Lip .. .. .	1	With Baby to feed it .. ..	2
Insufficient Vitality at Birth ..	3	With Mother for feeding ..	15
Malnutrition .. .. .	17		
Marasmus .. .. .	5		130

## VIII. Intoxications, Poisonings, etc.

Alcoholic Dementia .. .. .	1	Oxalic Acid Poisoning.. ..	1
Digitalis Poisoning .. .. .	1		
Lysol Poisoning .. .. .	1		4

## IX. Kidney Diseases.

Albuminuria .. .. .	1	Nephritis Parenchymatous ..	1
Enuresis .. .. .	4	Nephro Sclerosis, Diffuse ..	1
Haematuria .. .. .	4	Pyelitis .. .. .	22
Hydronephrosis, Double		Pylonephritis .. .. .	1
Congenital .. .. .	1	Pyuria .. .. .	1
Hypospadias .. .. .	1	Retention of Urine .. .. .	7
Nephritis .. .. .	36	Uraemia .. .. .	24
„ Acute Focal .. .. .	5		
„ Chronic Intestinal	6		115

## X. Bones, Joints and Fibrous Tissues and Glands (Affections of)

Arthritis, Chronic Infective ..	5	Backache .. .. .	2
„ Gonococcal .. .. .	1	Bruised Ribs .. .. .	1
„ of Knee .. .. .	2	Fibrositis .. .. .	7
„ Menopausal.. .. .	1	Haematoma of Axilla .. ..	1
„ Osteo .. .. .	4	Knee Trouble .. .. .	1
„ Osteo of Shoulder ..	1	Lumbago .. .. .	1
„ Osteo of Hip .. .. .	7	Paget's Disease.. .. .	1
„ Osteo of Knee .. .. .	2	Talipes Equino Varus .. ..	1
„ Osteo of Spine .. .. .	5	Tibia, Curved .. .. .	1
„ Rheumatoid.. .. .	35		
„ of Sacro Iliac .. .. .	1		80

## XI. Digestive System (Disorders of)

Abdominal Pain .. ..	1	Headache and Vomiting ..	1
Amyloid Disease .. ..	1	Heat Stroke .. ..	1
Anorexia .. ..	1	Hepatitis .. ..	2
Ascites .. ..	3	Hepatitis, Alcoholic .. ..	1
Cholaemia .. ..	1	Hiccough .. ..	1
Colic, Appendicular .. ..	1	Mega-Colon .. ..	1
„ Intestinal .. ..	7	Impacted Faeces .. ..	1
Colitis .. ..	2	Intestinal Stasis .. ..	2
Colitis, Ileo .. ..	2	Jaundice, Acholuric .. ..	1
„ Ulcerative .. ..	4	„ Catarrhal .. ..	6
Colonic Spasm .. ..	1	„ Obstructive .. ..	3
Constipation .. ..	9	Melaena Neonatorum .. ..	1
Diarrhoea .. ..	8	Mesenteric Cyst .. ..	2
Diverticulitis .. ..	2	„ Embolism .. ..	2
Dyspepsia .. ..	5	Oxyuris Vermicularis .. ..	2
Flatulence .. ..	1	Stomatitis .. ..	4
Gastric Neurosis .. ..	1	Tape Worm .. ..	1
„ Ulcer .. ..	39	Toxaemia .. ..	1
„ Ulcer, Perforated .. ..	4	Visceroptosis .. ..	2
Gastritis .. ..	7	Vomiting, Cyclical .. ..	2
Gastro Duodenal Ulcer .. ..	9	Yellow Atrophy of the Liver ..	1
„ Enteritis .. ..	42		
„ Intestinal Catarrh .. ..	3		
Haematemesis .. ..	11		

203

## XII. Diseases of the Skin.

Acne Vulgaris .. ..	1	Papular Urticaria .. ..	2
Callosities of Sole of Foot ..	1	Pediculosis Capitis .. ..	4
Cavernous Naevus .. ..	1	Pediculous Impetiginous Lesions	
Coccogenic Skin Infection ..	1	of Scalp .. ..	1
Dermatitis .. ..	9	Phtheiriasis .. ..	1
Dermatitis, Herpetiform .. ..	1	Psoriasis .. ..	4
„ Impetiginous .. ..	1	Rodent Ulcer .. ..	2
„ Seborrhoeic .. ..	1	Scabies .. ..	35
„ Traumatic .. ..	2	Senile Pruritus .. ..	1
Eczema .. ..	34	Sycosis Barbae .. ..	1
Erythema Nodosum .. ..	8	Syphilitic Ulcer of Leg .. ..	1
Epithelioma of Skin .. ..	1	Verruca .. ..	1
Herpes Gestationis .. ..	1	Xerosis .. ..	1
Impetigo .. ..	31		
Lichen Planus .. ..	2		
Melanotic Sarcoma .. ..	4		

153

## XIII. Blood Disorders.

Anaemia, Chronic Haemolytic		Anaemia, Splenic .. ..	1
of New Born .. ..	1	Leukaemia, Acute Lymphatic	1
„ Hypochromic .. ..	16	„ Myeloid .. ..	2
„ Hypochromic		Icterus Gravis Neonatorum ..	1
(Syphilitic) .. ..	1	Purpura, Hennoch's .. ..	1
„ Lederer's Haemolytic	1		
„ Nutritional .. ..	2		
„ Pernicious .. ..	10		

37

# CLASSIFICATION OF DISCHARGES.

## SURGICAL CASES.

### I. ALIMENTARY SYSTEM.

Appendicitis .. .. .	36	Internal Haemorrhoids ..	7
Appendix Abscess .. ..	2	Intestinal Obstruction ..	5
Carcinoma of the Anus ..	1	Intussusception .. ..	1
"    "    Caecum .. ..	1	Ischio Rectal Abscess ..	9
"    "    Colon .. ..	14	"    "    Sinus .. ..	2
"    "    Gall Bladder ..	2	Malignant Disease of Jaw ..	2
"    "    Jejunum .. ..	1	Mesenteric Adenitis .. ..	1
"    "    Liver .. ..	5	"    Thrombosis .. ..	1
"    "    Oesophagus ..	2	Pancreatitis, Chronic .. ..	1
"    "    Pancreas .. ..	2	Paralytic Ileus .. ..	1
"    "    Peritoneum ..	3	Pararectal Sinus .. ..	1
"    "    Pylorus .. ..	4	Perforated Sinus .. ..	1
"    "    Rectum .. ..	12	"    Colon .. ..	1
"    "    Sigmoid .. ..	1	Pericolitis .. ..	1
"    "    Stomach .. ..	23	Peritonitis Adhesive .. ..	1
"    "    Tongue .. ..	1	"    General Strept. ..	
Cholangitis, Infective ..	1	Primary .. ..	1
Cholecystitis, Acute .. ..	9	"    Suppurative .. ..	3
Cholelithiasis .. ..	6	"    Tuberculous .. ..	3
Cirrhosis of Liver .. ..	7	Polyposis of Ileum .. ..	1
"    "    Syphilitic ..	1	Prolapsed Rectum .. ..	2
Diverticulosis of Colon ..	2	Pruritus and Proctitis .. ..	1
Faecal Fistula .. ..	1	Pyloric Stenosis .. ..	7
Fistula in Ano .. ..	3	"    Ulcer .. ..	2
Foreign Body in Abdomen ..	1	Rectal Hamorrhage .. ..	1
Gastro Colic Fistula .. ..	1	Retro Peritoneal Sarcoma ..	1
Hernia, Diaphragmatic ..	1	Tabes Mesenterica .. ..	1
"    Femoral .. ..	5	Tuberculous Abdomen .. ..	3
"    Inguinal .. ..	27	Tumour of Abdomen .. ..	1
"    Umbilical .. ..	1	Volvulus of Intestine .. ..	4
"    Umbilica, Perforated ..	1		
"    Ventral .. ..	2		246
Hydatid Cyst of Liver .. ..	1		

### II. Genito-Urinary System.

Balanitis .. ..	3	Periurethral Abscess .. ..	1
Bladder Calculi .. ..	3	Prostatic Calculi .. ..	1
Carcinoma of the Bladder ..	1	Pyelitis .. ..	3
"    "    Kidney .. ..	2	Renal Calculi .. ..	18
"    "    Prostate .. ..	3	"    Colic .. ..	4
Cystitis .. ..	18	Salpingitis, Gonococcal .. ..	7
Cystitis, Septic .. ..	1	Sarcoma of the Kidney .. ..	1
Enlarged Prostate .. ..	22	Spermatocele .. ..	1
Extraversion of Urine .. ..	1	Stone in Ureter .. ..	2
Gangrene of Penis .. ..	1	Syphilis, Tertiary .. ..	17
Gonorrhoea .. ..	10	Tuberculous Bladder .. ..	1
Gonorrhoeal, Arthritis .. ..	1	"    Epididymitis .. ..	1
"    Stricture .. ..	1	"    GenitoUrinary ..	
"    Vaginitis .. ..	1	Tract .. ..	6
"    Warts .. ..	1	"    Kidney .. ..	3
Hydronephrosis .. ..	2	"    Sinus in Loin .. ..	1
Hypospadias .. ..	1	Ulceration of Penis .. ..	1
Malignant Vesical Papilloma ..	1	Urethral Caruncle .. ..	1
Nephroptosis .. ..	1	"    Sinuses .. ..	1
Orchitis .. ..	1	"    Stricture .. ..	4
"    Epididymo .. ..	1	Varicocele .. ..	1
"    Tuberculous .. ..	1	Re X-ray Investigation for Renal	
Papilloma of the Bladder ..	1	Calculi .. ..	1
Phimosis .. ..	16		
Perineal Abscess .. ..	1		172
Perinephritic Abscess .. ..	1		



### III. Affections of the Mouth, Ear, Nose and Throat.

Abscess, Alveolar .. ..	5	Laryngitis .. ..	5
„ Cervical .. ..	7	„ Hysterical .. ..	1
„ Peritonsillar .. ..	6	„ Tuberculous .. ..	1
Adenitis, Cervical .. ..	10	Mastoiditis .. ..	7
Adenitis, Cervical Tuberculous	3	Myringitis .. ..	1
Adenitis, Post Auricular ..	1	Naso Pharyngeal Catarrh ..	1
Adenoids .. ..	3	Neoplasm Antrum of Highmore	2
Aphonia .. ..	2	Oedema of Fauces .. ..	1
Aural Vertigo .. ..	1	„ Pharynx .. ..	1
Carcinoma of the Cervical Gland	4	Otitis Media .. ..	29
Carcinoma of Larynx ..	1	Otorrhoea .. ..	7
„ „ Naso Pharynx ..	1	Peritonsillitis .. ..	1
„ „ Pharynx ..	1	Pharyngitis .. ..	7
„ „ the Tongue ..	1	Pyorrhoea .. ..	6
Coryza .. ..	3	Sinusitis .. ..	5
Deafness, functional .. ..	3	Sinusitis, Antral .. ..	1
Dental Caries .. ..	164	„ Frontal .. ..	2
„ Cysts .. ..	1	Tonsillitis .. ..	40
„ Haemorrhage .. ..	1	Ulcer of Tongue .. ..	1
„ Sepsis .. ..	2	Vincent's Angina .. ..	1
Epistaxis .. ..	1		
Epithelioma of Ear .. ..	1		
„ „ Lip .. ..	1		
„ „ Palate .. ..	2		
			<hr/> 345 <hr/>

### IV. Affections of the Eyes.

Blepharitis .. ..	2	Meibomian Cyst .. ..	1
Cataract .. ..	1	Ophthalmia Neonatorum ..	5
Conjunctivitis .. ..	12	Strabismus .. ..	1
Contusion of Eye .. ..	1	Total Ophthalmoplagia ..	1
Corneal Ulcer .. ..	5	Traumatic Corneal Opicity ..	1
Diabetic Retinitis .. ..	1	Tumour of Eye .. ..	1
Familial Optic Atrophy ..	1		
Hypopyon .. ..	1		
Keratitis .. ..	6		
			<hr/> 40 <hr/>

### V. Affections of Bones and Joints.

Abscess of Thigh .. ..	1	Fracture of Radius and Ulna ..	6
Adenitis .. ..	2	„ Ribs .. ..	8
Adenitis, Popliteal .. ..	1	„ Skull .. ..	1
Bruised Shoulder .. ..	1	„ Tibia .. ..	3
Bursitis .. ..	5	„ Tibia and Fibula ..	5
Carcinoma of Dorsal Vertebrae	3	„ Wall of Antrum of	
„ „ Sternum ..	1	„ Highmore ..	1
Congenital Abnormality of		„ Vertebrae ..	1
„ Vertebrae ..	1	Hallux Valgus .. ..	1
„ Dislocation of Hip ..	7	Internal Derangement of Knee	1
„ Double Thumb ..	1	Multiple Injuries .. ..	1
Dislocation of Shoulder ..	2	Osteo Myelitis of Cervical	
Fibrositis .. ..	2	„ Vertebrae .. ..	1
Fracture of Clavicle .. ..	5	Osteo Myelitis of Femur ..	6
„ Colles .. ..	1	„ „ Foot .. ..	1
„ Femur .. ..	20	„ „ Humerus .. ..	2
„ Fibula .. ..	1	„ „ Jaw .. ..	1
„ Humerus .. ..	8	„ „ Tibia .. ..	9
„ Jaw .. ..	1	Osteoclastoma of Tibia ..	1
„ Multiple .. ..	2	Sarcoma of Bone .. ..	2
„ Pelvis .. ..	5	„ Knee .. ..	1
„ Patella .. ..	1	„ Tibia .. ..	1
„ Phalanx .. ..	3	Sequestrum of Foot .. ..	1

## V. Affections of Bones and Joints—continued.

Slipped Semi-Lunar Cartilage	2	Tuberculous Hip	..	..	34
Sprained Shoulder	..	..	..	..	19
Synovitis of Knee	..	..	..	..	3
Tuberculous Abscess Crest of	..	..	..	..	4
Ileum	..	..	..	..	18
„ Abscess and Ulcer	1	..	..	..	1
„ Adenitis	..	..	..	..	2
„ Ankle	..	..	..	..	1
„ Elbow	..	..	..	..	1
„ Foot	..	..	..	..	1
„ Glands	..	..	..	..	224

## VI. Respiratory System.

Abscess of Lung	..	..	3
Empyema	..	..	15
			18

## VII. Gynaecological Cases and Disorders connected with Pregnancy.

### Disorders of Pregnancy.

Abortion, Complete	..	..	22	Hyperemesis Gravidarum	..	7
„ Incomplete	..	..	51	Neurotic Vomiting of Pregnancy	..	2
„ Inevitable	..	..	2	Placenta Praevia	..	6
„ Self-induced	..	..	2	Placenta, retained	..	3
„ Septic	..	..	1	Placental Polypus	..	2
„ Threatened	..	..	9	Post Partum Lying in	..	2
Eclampsia	..	..	4	Pregnant (not Confined)	..	72
Haemorrhage, Accidental	..	..	6	Pyelitis of Pregnancy	..	32
„ Ante-partum	..	..	4	Toxaemia of Pregnancy	..	35
Hydramnios	..	..	1	Debility of Pregnancy	..	10

### Disorders of the Puerperium.

Perineal Tear	..	..	3	Puerperal Pyrexia	..	4
Puerperal Insanity	..	..	1	„ Psychosis	..	1
„ Toxaemia	..	..	1	Subinvolution	..	1

### Disorders of the Uterus.

Carcinoma of Cervix Uteri	..	19	Menorrhagia	..	8
„ Fundus Uteri	..	1	Metrorrhagia	..	4
Cervical Erosion	..	8	Polypus of the Uterus	..	1
„ Polypus	..	1	Procidentia	..	4
Dysmenorrhoea	..	3	Retroverted Uterus	..	10
Fibroid Uterus	..	3	Gonococcal Cervicitis	..	4
Cyst of Cervix	..	1	Prolapsed Uterus	..	10
Endometritis	..	5	Congenital Double Uterus	..	1
Leucorrhoea	..	1			

### Disorders of the Ovaries.

Carcinoma of the Ovaries	..	5	Ovarian Cyst	..	1
Endometrioma of the Ovary	..	1	Malignant Ovarian Cyst	..	2

### Disorders of the Fallopian Tubes.

Pyosalpinx	..	..	1	Salpingitis, Gonococcal	..	3
Salpingitis	..	..	7	„ Tuberculous	..	1

*Disorders of the Vagina.*

Carcinoma of the Vagina ..	3	Recto Vaginal Fistula ..	2
Bartholin's Cyst ..	1	Vaginitis ..	2
Epithelioma of Vulva ..	4	Vaginal Fistula ..	2
Impacted Pessary ..	1	Vulval Varicosities ..	1
Leukoplakia of Vulva ..	1	Vaginitis, Gonorrhoeal ..	2

*Disorders of the Breast.*

Breast Abscess ..	6	Flushed Breast ..	1
Carcinoma of the Breast ..	19	Mastitis ..	10
Cysto Adenoma of Mamma ..	1	Tumour of Breast ..	1

*Miscellaneous*

Amenorrhoea ..	1	Pelvic Cellulitis ..	2
Carneous Mole ..	1	Pelvic Abscess ..	1
Hydatidiform Mole ..	1	Pyometra ..	1
Menopause ..	3		

**VIII. Orthopaedic.**

Abscess of Thigh ..	1	Pes Carvus ..	4
Ankylosis of Jaw ..	1	Psoas Abscess ..	1
Anterior Poliomyelitis ..	11	Rickets ..	7
Arthritis of Hip ..	5	Sarcoma of Tibia ..	1
"    Knee ..	2	Sciatica ..	1
"    Rheumatoid ..	2	Spastic Paralysis ..	5
"    Sacro Iliac ..	1	Spina Bifida ..	1
Bilateral Claw Toes ..	1	Structural Scoliosis ..	1
Burn Contraction ..	1	Supracondylar Fracture Radius	
Congenital Dislocation of Hip	7	and Ulna ..	4
"    Equino Varus ..	4	Synovitis of Knee ..	1
Curved Tibia ..	1	Syringomyelia ..	1
Deranged Knee Cartilage ..	2	Talipes Equino Varus ..	1
Fibrositis ..	1	Torticollis ..	1
Fractured Tibia ..	1	Tuberculous Abscess Crest of	
Fractured Femur ..	2	Ileum ..	1
Genu Varum ..	3	Tuberculous Abscess and Ulcer	1
Hallux Valgus ..	3	"    Ankle ..	2
Hammer Toes ..	4	"    Bursitis ..	1
Ingrowing Toe Nail ..	1	"    Elbow ..	2
Internal Derangement of Knee	2	"    Foot ..	1
Knee Trouble ..	1	"    Glands ..	1
Loose Body in Knee ..	1	"    Hip ..	34
Multiple Congenital Defects ..	1	"    Knee ..	19
Osteo Arthritis of Hip ..	1	"    Sacro Iliac ..	3
"    Arthritis of Knee ..	1	"    Wrist ..	2
"    Myelitis of Arm ..	3	"    Shoulder ..	4
Osteo Myelitis of Cervical Vert.	1	"    Spine ..	18
"    "    Femur ..	4	"    Tarsus ..	1
"    "    Foot ..	1	Ulceration of Foot ..	1
"    "    Humerus ..	1		
"    "    Tibia ..	9		
Perthes Disease ..	3		

203



## IX. Summary of Malignant Growths.

Carcinoma of the Anus ..	1	Carcinoma of the Stomach ..	23
„ „ Bladder ..	1	„ „ Tongue ..	1
„ „ Brain ..	1	„ „ Vagina ..	3
„ „ Breast ..	19	„ „ Vertebrae ..	3
„ „ Bronchus ..	11	Endothelioma of Pleura ..	1
„ „ Caecum ..	1	Epithelioma of Ear ..	1
„ „ Cervical Glands ..	4	„ „ Lip ..	1
„ „ Cervix Uteri ..	19	„ „ Palate ..	2
„ „ Colon ..	14	„ „ Skin ..	1
„ „ Fundus Uteri ..	1	„ „ Vulva ..	4
„ „ Gall Bladder ..	2	Malignant Disease of Jaw ..	1
„ „ Jejunum ..	1	„ Ovarian Cyst ..	2
„ „ Kidney ..	2	„ Tumour of Eye ..	1
„ „ Larynx ..	1	„ Vesical Papilloma ..	1
„ „ Liver ..	5	Melanotic Sarcoma ..	4
„ „ Mediastinum ..	1	Neoplasm Antrum of Highmore ..	2
„ „ Naso Pharynx ..	1	Papilloma of Bladder ..	1
„ „ Oesophagus ..	2	Rodent Ulcer ..	2
„ „ Ovary ..	5	Retro Peritoneal Sarcoma ..	1
„ „ Pancreas ..	2	Sarcoma of Bone ..	2
„ „ Peritoneum ..	3	„ Knee ..	1
„ „ Pharynx ..	1	„ Mandible ..	1
„ „ Prostate ..	3	„ Tibia ..	1
„ „ Pylorus ..	4	„ Kidney ..	1
„ „ Rectum ..	12		
			178

## X. Miscellaneous.

Abrasions of Face ..	1	Gangrene ..	11
Abscess of Arm ..	1	Haematoma of Face ..	1
Abscess, Axillary ..	2	„ „ Scalp ..	2
Abscess of Buttock ..	5	Infective Pulp Finger ..	1
„ Foot ..	1	Injury to Leg ..	1
„ Groin ..	1	Ingrowing Toe Nail ..	1
„ Jaw ..	2	Lymphadenoma ..	2
„ Leg ..	1	Lymphangitis ..	3
Abscess, Lumbar ..	1	Paronychia ..	1
„ Multiple ..	1	Phlebitis ..	17
„ of Neck ..	2	Post Traumatic Oedema ..	1
„ Post Auricular ..	1	Septic Leg ..	1
„ of Scalp ..	1	„ Thumb ..	3
„ Submaxillary ..	1	„ Toe ..	1
„ Supra orbital ..	1	Sinus of Buttock ..	1
Adenitis, Inguinal ..	1	Sinuses ..	2
Bruised Lip ..	1	Ulceration of Knee ..	1
Burns and Scalds ..	4	„ „ Leg ..	2
Carbuncles ..	17	Ulcers ..	5
Cellulitis ..	13	Ulcers, Varicose ..	14
Cephalhaematoma ..	2	Varicose Veins ..	14
Concussion ..	5	Wound of Forehead ..	2
Contusions ..	4	„ Leg ..	1
Cut Throat ..	1	„ Lip ..	1
Cyst, Sebaceous ..	2		
Furunculosis ..	2		163

## CAUSES OF DEATH.

1st January, 1938, to 31st December, 1938.

### I. General Infections.

Actinomyccosis .. .. .	1	Septicaemia, General ..	2
Erysipelas .. .. .	1	„ Pneumococcal ..	1
Miliary Tuberculosis ..	2	„ Streptococcal ..	2
Toxaemia .. .. .	2	„ Staphylococcal ..	1

### II. Respiratory System.

Abscess of Lung .. .. .	2	Pneumonia, Broncho ..	21
Asthma, Cardiac .. .. .	1	„ Hypostatic ..	6
Bronchiectasis .. .. .	1	„ Influenzal ..	1
Bronchitis .. .. .	8	„ Lobar ..	22
Lung Infarction .. .. .	1	Respiratory Failure ..	1
Pulmonary Tuberculosis ..	56		

### III. Circulatory System.

Aortic Disease .. .. .	1	Hyperpiesia .. .. .	3
Arterior Sclerosis .. .. .	7	Infective Endocarditis ..	1
Auricular Fibrillation ..	19	Mitral Stenosis .. .. .	2
Cardiac Failure .. .. .	12	Myocarditis .. .. .	27
Cardio Renal Heart Failure ..	1	Myocardial Degeneration ..	8
Circulatory Failure and Shock	1	Pericarditis .. .. .	2
Congestive Heart Failure ..	6	Rheumatic Carditis .. ..	1
Coronary Infarction .. .. .	1	Subacute bacterial endocarditis	2
„ Thrombosis .. .. .	5	Syncopal Heart Failure ..	1
Haemorrhage into Adrenals ..	1	Congenital Heart Disease ..	1

### IV. Nervous System.

Acute Encephalo Meningitis ..	1	Intra Cranial Haemorrhage ..	1
Amotrophic Lateral Sclerosis ..	2	Meningitis, Influenzal ..	1
Carcinoma of the Brain .. ..	1	„ Meningococcal ..	1
Cerebral Embolism .. .. .	2	„ Pneumococcal ..	2
„ Haemorrhage .. .. .	8	„ Tuberculous .. .. .	1
„ Thrombosis .. .. .	19	Neonatal Infantile Convulsions	1
„ Tumour .. .. .	1	Neuro-Syphilis .. .. .	1
Encephalitis .. .. .	1	Progressive Muscular Atrophy	1
Gumma of Brain .. .. .	1	Status Epilepticus .. .. .	1
General Paralysis of the Insane	1	Subarachnoid Haemorrhage ..	1

### V. Mental Disorders.

NIL.

### VI. Metabolic and Endocrinal.

Diabetes Mellitus .. .. .	8
---------------------------	---

### VII. Nutritional and Congenital Defects.

Congenital Abnormality of Bile Ducts .. .. .	1	Malnutrition .. .. .	1
Hydrocephalic Monster .. ..	1	Multiple Congenital defects ..	1
Inanition .. .. .	1	Prematurity .. .. .	16
Insufficient Vitality at birth ..	2	Senility .. .. .	12
		Spina Bifida .. .. .	1

### VIII. Poisonings, Intoxications, etc.

Lysol Poisoning .. .. .	1
-------------------------	---

### IX. Kidney Diseases.

Hydronephrosis .. ..	1	Pyelitis .. ..	1
Interstitial Nephritis .. ..	3	Uraemia .. ..	16
Nephritis .. ..	7		

### X. Digestive System.

Acute Yellow Atrophy of Liver	1	Intestinal Obstruction .. ..	2
Gastric Enteritis .. ..	10	„ Stasis .. ..	2
Gastric Ulcer .. ..	3	Mesenteric Thrombosis .. ..	1
Haematemesis .. ..	1	Perforated Gastric Ulcer .. ..	2
Intestinal Catarrh .. ..	2		

### XI. Affections of the Skin.

Epithelioma of Skin .. ..	1	Melanotic Sarcoma .. ..	1
Icterus Neonatorum .. ..	1		

### XII. Diseases of the Blood.

Leukaemia, Spleno medullary	1	Pink Disease .. ..	1
-----------------------------	---	--------------------	---

### XIII. Alimentary System.

Appendicitis .. ..	2	Carcinoma of Splenic Flexion .. ..	1
Carcinoma of Caecum .. ..	1	„ of Colon .. ..	2
„ Colon .. ..	9	Cirrhosis of Liver .. ..	1
„ Gall Bladder .. ..	2	General Primary Strept. Peritonitis .. ..	1
„ Jejunum .. ..	2	Hernia, Strangulated Femoral .. ..	1
„ Liver .. ..	1	Impacted Gall Stones .. ..	1
„ Oesophagus .. ..	1	Malignant Disease of Jaw .. ..	1
„ Pancreas .. ..	2	Perforated Carcinomatous Ulcer .. ..	1
„ Rectum .. ..	5	of Stomach .. ..	2
„ Sigmoid .. ..	2	Peritonitis, Pneumococcal .. ..	3
„ Stomach .. ..	13	Ulcerative Colitis .. ..	

### XIV. Genito Urinary System.

Calculus in Kidney .. ..	1	Enlarged Prostate .. ..	8
Carcinoma of Bladder .. ..	1	Sarcoma of Kidney .. ..	1
„ Kidney .. ..	1	Syphilitic Cirrhosis of Liver .. ..	1
„ Prostate .. ..	1	Syphilis, Tertiary .. ..	1
Cystitis .. ..	2	Tuberculous Kidney .. ..	1

### XV. Affections of Mouth, Ear, Nose and Throat.

Carbuncle of Nose .. ..	1	Epithelioma of Ear .. ..	1
„ Lip .. ..	1	„ Palate .. ..	1
Carcinoma of Cervical Gland .. ..	1	Neoplasm Antrum of Highmore .. ..	2
„ Larynx .. ..	1	Otitis Media .. ..	1
„ Pharynx .. ..	1	Sarcoma of Mandible .. ..	1

### XVI. Affections of the Eyes.

NIL.

### XVII. Affections of Bones and Joints.

Carcinoma of Glands of Neck	1	Fractured Ribs .. ..	1
„ Sternum .. ..	1	Sarcoma of Femur .. ..	1
„ Pharynx .. ..	1	„ Vertebrae .. ..	1
Fractured Femur .. ..	8	Tuberculous Spine .. ..	1
„ Humerus .. ..	1		



### XVIII. Respiratory System (Surgical).

Carcinoma of the Bronchus	6	Empyema	..	..	..	4
---------------------------	---	---------	----	----	----	---

### XIX. Maternity and Gynaecological.

Carcinoma of the Breast	..	11	Carcinoma of the Uterus	..	5
„ „ Cervix	..	5	„ „ Vulva	..	1
„ „ Ovary	..	4			

### XX. Miscellaneous.

Burns of Leg	..	..	1	Lymphadenoma	..	..	1
Cellulitis	..	..	1	Multiple Injuries and Fractures			1
Gangrene of Fingers and Arm			1	Rodent Ulcer of Face	..		1
Gangrene of Foot	..	..	3				

### XXI. Orthopaedic.

NIL.

### XXII. Malignant Growths—Summary of.

Carcinoma of Bladder	..	1	Carcinoma of Prostrate	..	1
„ Brain	..	1	„ Rectum	..	5
„ Breast	..	11	„ Sigmoid	..	2
„ Bronchus	..	6	„ Splenic Flexion of		
„ Caecum	..	1	„ Colon	..	1
„ Cervix	..	5	„ Sternum	..	1
„ Cervical Glands		1	„ Stomach	..	13
„ Colon	..	9	„ Uterus	..	5
„ Gall Bladder	..	2	„ Vulva	..	1
„ Glands of Neck		1	Epithelioma of Palate	..	1
„ Jejunum	..	2	Epithelioma of Skin	..	1
„ Kidney	..	1	Gumma of Brain	..	1
„ Larynx	..	1	Malignant Disease of Jaw	..	1
„ Liver	..	1	Melanotic Sarcoma of Skin	..	1
„ Oesophagus	..	1	Neoplasm Antrum of Highmore		2
„ Ovary	..	4	Sarcoma of Femur	..	1
„ Pancreas	..	2	„ Mandible	..	1
„ Pharynx	..	1	„ Vertebrae	..	1

## CLIMATOLOGICAL STATION.

The Health Department undertook to run a Climatological Station at the City General Hospital, under my control, as a result of approaches from the Department of Science and Industrial Research and from the Meteorological Office.

The records from this Station are not only used by the Meteorological Office but they form a vital part of the programme on Atmospheric Pollution in Leicester.

The equipment consists of :

**Dines Tube Anemometer** at 385 feet above sea level, which gives Automatic recording of Wind Direction and Velocity.

**Barometer**, Kew pattern, giving accurate readings of Air Pressure at station level 341.59 feet.

**Barograph** recording variations of Air Pressure.

**Stevenson Screen** accommodating—

Thermometer.	Dry Bulb
„	Wet Bulb
„	Maximum
„	Minimum
„	Grass Minimum

**Thermograph**, recording variations of temperature.

**Hair Hygograph** recording variations of humidity.

Earth Thermometers at 1ft. and 4ft. deep.

**Rain Gauge.**

**Campbell-Stokes Sunshine Recorder.**

The Station was opened on the 14th June, 1937, and since then regular observations have been taken at 9 hrs. G.M.T. and at Sunset. The records are tabulated and sent to the Meteorological Office each month and are published in the “Monthly Weather Report,” issued by the authority of the Meteorological Committee.

In addition to the records taken from the various instruments visibility, cloud effects, and state of ground are taken.

The past year has been characterised by a number of gales, gale-force being recorded on 18 days during the year. The maximum recorded was a gust of 78 miles per hour on the 24th November, 1938.

Snow fell on 9 days during the year.

Extracts from Monthly Records.

Daily Means.	Dry Bulb.	Wet bulb.	Maximum.	Minimum.	Humidity.
January	41.0	39.8	47.2	36.7	89.1%
February	39.9	38.2	45.6	35.6	84.0%
March	45.9	43.7	57.8	39.0	83.1%
April	46.3	42.7	55.3	34.6	72.0%
May	52.5	48.2	60.8	41.5	71.5%
June	58.6	53.9	67.1	48.9	71.8%
July	59.7	55.9	68.1	50.5	78.3%
August	60.2	57.5	70.0	52.3	84.2%
September	56.7	54.7	64.0	48.0	87.2%
October	50.0	47.9	57.0	43.7	85.4%
November	47.8	46.4	55.0	41.6	89.5%
December	37.8	37.0	43.4	33.3	91.6%

			Sunshine Hours.	Rainfall Inches.
January	..	..	35.2	2.64
February	..	..	50.5	0.66
March	..	..	128.2	0.21
April	..	..	141.5	0.05
May	..	..	162.0	1.55
June	..	..	167.0	1.32
July	..	..	134.7	2.61
August	..	..	142.0	3.53
September	..	..	100.0	1.94
October	..	..	111.3	2.02
November	..	..	76.3	2.10
December	..	..	34.5	3.07
			1283.2	21.70

Warmest Day	Warmest Night	Coldest Day	Coldest Night
<i>Highest</i>	<i>Highest</i>	<i>Lowest</i>	<i>Lowest</i>
<i>Maximum.</i>	<i>Minimum.</i>	<i>Maximum.</i>	<i>Minimum.</i>
5th August	31st July	20th December	21st December
79°F.	62°F.	26°F.	13°F.

E. H. BALL, *Steward.*



**Report on**  
**Maternity and Child Welfare**  
for the year 1938.

By

E. B. BERENICE HUMPHREYS, M.B., Ch.B., Edin.,  
Maternity and Child Welfare Medical Officer.

With foreword by the Medical Officer of Health.

## COMMENTS BY THE MEDICAL OFFICER OF HEALTH.

In my foreword to Dr. Humphreys' report of last year, I stated that the year 1937 had been an outstanding year in the history of the Maternity and Child Welfare Service of Leicester.

The year 1938 now under review has been hardly less important. It has been a year of consolidation, but also of further growth and expansion.

Dr. Humphreys' report is a long one but repays detailed study, for in it will be found the story of work done which will have a great influence on the future of our City.

1. The increase in health visiting staff has enabled the department to devote more time to the important work of home visiting.

2. There has been a marked increase in the quantity of milk given to necessitous cases.

3. 1938 is the first whole year during which there has been a full-time medical staff of the department.

4. The number of ante-natal attendances at the various clinics shows a welcome increase.

5. The municipal midwifery scheme is fully commented upon.

6. The new scheme for the training of pupil-midwives came into operation during the year and is discussed.

# Report on Maternity and Child Welfare for the year 1938.

By

E. B. BERENICE HUMPHREYS, M.B., Ch.B., Edin.,  
Maternity and Child Welfare Medical Officer.

The statutory Maternity and Child Welfare Committee (appointed under the provisions of the Maternity and Child Welfare Act, 1918) consists in Leicester of the full Health Committee, together with three co-opted lady members.

Actually, the work is carried out by a Sub-Committee of eight members of the Health Committee, together with the three co-opted members, which meets each month.

## HEALTH VISITORS.

The present staff comprises 21 District Health Visitors, together with a Superintendent Health Visitor, and one Health Visitor who is employed entirely in connection with Diphtheria Immunisation. Their names and qualifications are set out on page vi.

The following is a statistical report of the work done by the Health Visitors during 1938 :—

### Health Visiting.

(Corresponding figures for the previous year are shown in brackets)

Number of first visits to children under one year old	3,646	(3,606)
„ „ revisits to children under one year old ..	19,736	(17,602)
„ „ visits to children one to five years old ..	24,349	(20,936)
„ „ visits to cases of Ophthalmia Neonatorum	44	(60)
„ „ first visits to ante-natal cases .. ..	507	(496)
„ „ other visits to ante-natal cases .. ..	227	(150)
„ „ visits to children under Infant Life Protection Act .. .. ..	837	(815)
„ „ other visits (no access) .. .. ..	9,644	(6,188)
„ „ „ „ (not classified) .. .. ..	1,406	(889)
Totals .. .. ..	60,396	(50,742)



**Attendance of Health Visitors at Clinic sessions :—**

Infant Welfare Centres	..	..	..	..	2,047	(1,869)
Ante-Natal Clinics	..	..	..	..	717	(674)
Post-Natal Clinics	..	..	..	..	54	—
Birth Control Clinic	..	..	..	..	89	(82)

The home visiting is regarded as the primary duty of a health visitor and every effort is made to prevent it from being subordinated to the increasing demands of other branches of the work. It is gratifying to record that, with the appointment of two additional Health Visitors, who commenced duties in April, the home visiting which had decreased with the opening of new clinic sessions in 1937, now shows a definite increase when compared with the previous year. Further, comparison with the years prior to 1937, i.e., before the decrease, shows that the home visiting—at all ages—is now approaching its former level which it is intended to maintain.

The figure 3,646, the number of first visits to children under one year old, is considered to be very satisfactory when compared with 3,891, which was the number of births notified (excluding outward transfers). This represents visits to 93.7 per cent. of such births. The difference of 245 can be offset by the number of infant deaths within two weeks of birth, i.e. before the health visitor visits, and the comparatively small number of infants who are not visited at all by Health Visitors.

The figure 19,736, the number of re-visits to children under one year old, shows an increase of 2,134 as compared with the year 1937 and is approaching the figure of previous years.

The figure 24,349, the number of visits to children 1—5 years old, is an increase of 3,413 on the previous year. The attention of Health Visitors has been drawn to the necessity of supervising the ex-baby and the toddler and the increase in this section of the work is very gratifying.

The figure 9,644, represents the number of times Health Visitors visited and there was no access. The proportion of such visits is greater than for some years, though it always accounts for a regrettably large amount of the Health Visitors' time. In arranging new clinic sessions, the desirability of leaving the Health Visitor free in the mornings for home visiting is kept in mind, to limit, as far as possible, the number of "no access" visits. It is probable that the relatively large amount of employment of women in the city accounts for the high figure in this section.

In reviewing the amount of district visiting accomplished, the increase in weekly clinic sessions must be borne in mind. During the year there were 282 more attendances than in 1937, and this figure will tend to increase until the whole scheme for branch clinics is in operation.

The year under review was an exceptional one as regards long periods of sick leave. One Health Visitor had a tragic fatal illness of three months, a second was granted six months' leave of absence in September, owing to illness, and a third has been on continuous sick leave since October. These absences, together with the short-period sick leaves inevitable amongst a large staff, have made it difficult at times to maintain the routine work of the department.

### LOCAL GOVERNMENT ACT, 1929.

The two sections of this Act, which concerned the Maternity and Child Welfare Department were (1) the care of destitute children and (2) the supervision of children who were nursed for gain (Infant Life Protection).

Up to the present the Maternity and Child Welfare Sub-Committee has not taken over from the Public Assistance Authority the care of the destitute children under five years of age.

As regards the working of the Infant Life Protection Section of the Children Act, 1908, this was transferred to the Public Health Authority, and each Health Visitor is now the appointed inspector of young children who are nursed out for gain.

The amendments as to the type of children to be registered and the methods of supervision which came into force following the alteration of the law in 1932 and which are detailed in earlier reports, continue to work satisfactorily.

During the year, 837 visits were paid to children in the care of persons who receive them for reward. Applications for registration were received from 52 persons. These were refused by the Committee on the report of the Visitors in respect of 10 persons, and concerning 12 children. Legal proceedings were not necessary to obtain other provision for the children concerned. In most cases it is possible to arrange for this as soon as an unsatisfactory report is received.

A high standard is insisted upon for all women recommended for registration and the Superintendent Health Visitor also visits all cases in which there are any doubtful circumstances or condition.



Following registration, the appointed Visitor pays monthly visits so as to keep in constant touch with the child and its foster-parent.

At the end of the year there were 58 persons and 61 children on the Infant Life Protection Register.

## OPHTHALMIA NEONATORUM.

The following details show the incidence and results of treatment of this disease of the new-born during 1938 :—

### OPHTHALMIA NEONATORUM, 1938.

Cases notified during year	..	..	..	..	..	30
Visited by Health Visitors	..	..	..	..	..	30
Removed to hospitals	..	..	..	..	..	3
Treated in Hospital	..	..	..	..	..	7
Result of Treatment :—						
Vision unimpaired	..	..	..	..	..	28
„ impaired	..	..	..	..	..	—
„ lost	..	..	..	..	..	—
Still under treatment at end of year				..	..	1
Patients died (from other causes)	..		..	..	..	—
Removed from district	..	..	..	..	..	1
						—
Total	..	..	..	..	..	30
						—

Most of the cases were of a very mild nature and responded to domiciliary treatment within a few days. In three cases, hospital treatment was considered advisable and proved to be satisfactory.

## ASSISTANCE IN NECESSITOUS CASES.

A special sub-committee, of which Mrs. Councillor Simpson is Chairman, meets twice a month to consider applications for help in necessitous cases of mothers or children under five years of age. Every application has to be made in writing on a special form, which includes a full statement of all sources of incomes, together with particulars as to rent, number of dependent children, etc. The Health Visitor appends a report on each case.

A medical certificate is also required concerning the health of the persons for whom help is sought. This is usually supplied at a Maternity and Child Welfare Centre, but a certificate from a private practitioner is accepted in cases which cannot attend a centre. During the year an income scale was adopted by the Maternity and Child Welfare Sub-Committee, the application of which makes for equality in connection with all grants made by this Committee.



The amount and variety of assistance granted may be seen from the following figures :—

(The corresponding figures for the previous year are shown in brackets).

Number of new cases granted milk .. ..	790	(504)
Number of old cases granted milk .. ..	2970	(1520)
Number of gallons of milk granted free ..	14,019	(7617)
Number of cases granted dried milk free ..	267	(142)
Number of cases admitted to the Day Nursery at reduced rate .. .. .	21	(27)
Number of cases admitted to the Maternity Home at reduced rate .. .. .	2	(2)
Number of cases in which doctors' fees were remitted .. .. .	27	(48)
Number of cases in which total fees for midwives were allowed .. .. .	28	(21)
Number of cases in which part fees for midwives were allowed .. .. .	4	(3)
Number of cases in which dental fees were remitted .. .. .	14	(12)
Number of home helps supplied .. ..	—	(—)
Number of cases in which no action was taken	91	(22)

It will be seen that the number of cases—and therefore the amount of assistance—has increased, particularly in respect of grants of milk. But this is in accordance with the recommendation of the Advisory Committee of the Ministry of Health. Where it is recommended on medical grounds, an expectant or nursing mother can now obtain up to two pints of milk a day and a child one to two pints, though it is exceptional for the maximum amount to be supplied by the Committee. It is hoped eventually that the scheme of specially cheap milk now available to school children may be extended to include mothers and pre-school children.

## SCHOOLS FOR MOTHERS AND INFANT WELFARE CENTRES.

A new Centre was opened in January, 1938, at the Parish Hall, Old Aylestone, which has relieved the congestion at a neighbouring clinic and obviated a laborious journey for many mothers.

The work of the Coleman Road Centre was transferred in April to more convenient and commodious premises in Gedding Road and has proved a great improvement to all concerned.

**Justice Street Infant Welfare Centre.** For some months the attendances at this Centre have been so large as to render the work almost impossible, due to the unavoidable congestion which takes

place in the one large assembly room which is used for all purposes. (A very small anteroom is used by the doctor). At times there have been over 200 mothers and children in this one room. The nearest Centre is at Belgrave Hall, which is working to full capacity with two weekly sessions. Further, there is no Centre within reasonable distance of the newly-populated district of Abbey Lane and Mowacre Hill. It is, therefore, proposed to open a new Centre during 1939 in the only available premises—a small Mission Hall at the north end of Abbey Lane. This should serve as a temporary expedient until the proposed branch clinics at Thurcaston Road and Woodgate materialise.

Miss Went, who has been an ardent joint president with Mrs. Bouskell at this Centre for many years, relinquished her work upon leaving the City. Her place has been taken by Miss Hoskins, who was already attached to the Centre.

**Braunstone Estate.** The situation created by the rehousing of a slum clearance population on part of this estate, with no provision of any assembly hall for child welfare and other work, has made the work extremely difficult. The nearest Centre was  $1\frac{1}{2}$  miles away from some houses and the Maternity and Child Welfare Sub-Committee has, therefore, provided a 'bus to convey mothers and children to the Centre. It is hoped that the new Branch Clinic to be erected in Cort Crescent on the re-housing estate, will remove the many problems which have arisen in connection with the maintaining of a maternity and child welfare service for this section of the population.

There are now 21 Centres in Leicester with 25 medical weekly sessions at which mothers may attend and bring their children under five years of age. Two Centres—Uppingham Road and Belgrave Hall—each have two weekly sessions, and the Highcross Street and King Street (Milk Depot) premises are open daily and have two medical sessions a week.

A doctor is in attendance at each session to give free medical advice to the mother about her child and herself in relation to the child. When any treatment is found to be necessary, the mother is advised as to where she should obtain it.

All children are medically examined on their first visit and thereafter as is considered necessary. In addition, mothers are urged to bring their children for a medical examination as soon as possible after each birthday until they go to school.

The following is a detailed list of the Centres.

Name.		President.	Day of Meeting.
Western Road	.. ..	Mrs. Beale	Monday
Curzon Street	.. ..	Mrs. Frears	„
Clipstone Street	.. ..	Mrs. Beech	„
Braunstone	.. ..	Mrs. Mould	„
Aylestone Village	.. ..	Miss Rogers	„
Highcross Street Toddlers	.. ..	—	„
Southfields Drive	.. ..	Mrs. Scott	„
18, King Street	.. ..	—	„ (morning)
Bedford Street	.. ..	Mrs. Macdonald	Tuesday
Wesley Hall	.. ..	Mrs. Furnish	„
Aylestone Road	.. ..	Miss Windley	„
Cavendish Road	.. ..	Mrs. Johnson	„
Fosse Road South	.. ..	—	„
18, King Street	.. ..	—	„
Uppingham Road	.. ..	Mrs. Judge	Wednesday and Friday
Kelland College	.. ..	Mrs. Goodger	Wednesday
Justice Street	.. ..	Mrs. Bouskell and Miss Hoskins	„
Humberstone	.. ..	Mrs. Wheatley	„
Belgrave Hall	.. ..	Mrs. Mantle	Thursday and Friday.
Clarendon Park	.. ..	Mrs. Roberts and Mrs. Ashwell	Thursday
Highcross Street	.. ..	Mrs. Viccars	„
Evington	.. ..	Mrs. Richardson	Alternate Thursdays
Gedding Road	.. ..	Mrs. Herbert	Friday

### Medical Staffing of Infant Welfare Centres.

The re-organising of the medical staffing, on a full-time basis, as detailed in the last Annual Report, came into force in November, 1937, and has worked well during its first year. The doctors undertaking the medical work at the Infant Welfare Centres are also engaged in school medical service work so that uniformity and continuity of the work from birth to school-leaving age may be ensured. Further, the service now has a regular attendance of not less than two hours per session so that it is becoming possible to arrange for systematic medical examinations of children at definite age periods. In this connection, the record cards at the Centres have been revised and from them it will be possible to summarise information to be transferred to the School Medical Department when the child commences school. This arrangement is long overdue but was not considered possible until uniformity of record-keeping with systematic medical examinations had been established.



In addition to members of the school medical service staff, the Assistant Tuberculosis Officer and a member of the resident medical staff of the City Isolation Hospital also attend at some of the Centres each week.

### Health Visitors.

Two Health Visitors are now attached to each Centre and with the re-organisation of the medical staffing, their time has been very fully occupied so that in some instances the series of fortnightly talks has been in abeyance. But it is now becoming possible to re-establish this important branch of mothercraft which has always been a prominent feature of the work of the Centres in the City.

The following numerical details for 1938 are some indication of the amount of work which is undertaken at the Centres :—

(Corresponding figures for the previous year in brackets).

Number of Sessions held ..	1,170	(1,074)		
Total attendances of Mothers	69,158	(70,665)		
Total attendances of Children—				
Under one year old ..	47,601	} 83,508	(43,268)	} (76,456)
Over one year old ..	35,907		(33,188)	
First visits of Children—				
Under one year old ..	3,062	} 4,109	(3,007)	} (3,978)
Over one year old ..	1,047		(971)	
Number of Children attending—				
Under one year old ..	2,619	} 7,818	(2,619)	} (7,272)
Over one year old ..	5,199		(4,653)	
Number of Sessions at which a doctor was present ..	1,170			(1,073)
Number of children seen by a doctor .. .. .	24,794			(20,480)

It will be seen that there is a marked increase in many sections of the work.

The number of sessions held was 1,170, an increase of 96 as compared with the previous year. This figure has increased by 282 in the last two years.

The total attendances of mothers was 69,158—actually some 1,507 less than the figure of the previous year which was over 70,000 and represented an increase of 15,770 as compared with the attendances in 1936. It was to meet this rapid increase that additional sessions have been introduced during the last two years. It is not desirable

to have large sessions, particularly in some of the existing premises, as it is impossible to do efficient work.

The average attendances of mothers per session was 59, but on some occasions there have been more than 100 mothers per session (the average is reduced by the smaller attendances which occur during bad weather, etc.).

The total attendances of children under one year was 47,601—an increase of 4,333 as compared with the year 1937 when there was also an increase of 8,432.

The total attendances of children over one year was 35,907, an increase of 2,719 on the figure for the previous year when there was also an increase of 5,440.

Of the children under one year, 3,062 attended for the first time. This figure may be a little greater than the actual number of children concerned as it is known that certain children may attend more than one Centre in the course of a year. But even allowing for this discrepancy a total of 3,062 out of 3,873 corrected births during 1938, i.e., 79 per cent. of the births, may be regarded as satisfactory.

Of the children over one year old, 1,047 attended for the first time, as compared with 971 in the previous year. This figure should not be a large one or show any tendency to increase to any extent as it is desirable that children should be brought to the Centre in their infancy.

The number of children still attending at the end of the year was 2,619 under one year and 5,199 over one year old—making a total of 7,818 remaining on the register.

But attendances alone are not the main object of the Infant Welfare Centre. With the re-organising of medical staff, a weekly session of not less than two hours is assured so that it is possible to arrange for many more children to see the doctor and to have more systematic and periodic medical examinations. During the year there were 24,794 medical consultations, an increase of 4,314 as compared with the previous year. This figure has risen from 16,923—that is, an increase of 7,871 in two years. The average number of medical consultations per session was 21, which may be considered satisfactory in view of the fact that the type of medical examinations and consultations is now more detailed and comprehensive. Altogether the standard and scope of the work have definitely improved and widened with the appointment of full-time medical staff.

**Clinic Premises.** The urgency of this question was detailed in the previous report. The scheme for erecting clinic premises to be used jointly by the Maternity and Child Welfare and School Medical Service Departments was surveyed in November by officials from the Ministry of Health and the Board of Education. It is hoped that the scheme will receive their official sanction so that the present inadequacies and inconveniences will not be continued indefinitely.

There are two Infant Welfare Centres which are open daily in premises permanently rented by the Corporation, viz., 18, King Street and 119, Highcross Street.

**1. The Infants' Milk Depot (18, King Street)** was established elsewhere 33 years ago, primarily for the distribution of dried milk to combat epidemic infantile diarrhoea.

Mrs. Stanion continues as Manageress and there are two assistants for the routine work in connection with the sale of dried milk and other food stuffs, and the distribution of supplies to the various Infant Welfare Centres.

The premises are also used each week for two infant consultation centres, an ante-natal clinic and a birth-control clinic. They were tenanted as a temporary measure in 1931, though they are unsuitable for the work of Maternity and Child Welfare and it is hoped that the work will be transferred to more convenient premises in the near future.

The details of the infant welfare work, expressed numerically, are:—

			1938	1937	1936
Number of children weighed	..	..	2,932	4,615	5,047
Attendances for advice only	..	..	1,268	1,756	2,443
Number of new cases	..	..	228	306	367
Number of test feeds carried out		..	147	244	223

At the weekly clinic session held for mothers attending the Milk Depot the attendances were:—

			1938	1937	1936
Number of clinic sessions	..	..	48	48	48
Number of new cases attending		..	228	306	367
Total attendances at clinic	..	..	798	969	926
Average attendance per session	..	..	17	20	19

It will be seen that the general decrease in the work, commented upon in previous reports, continues. This is partly due to the displacement of the population in the neighbourhood but is due in a larger measure to the continued policy of discouraging mothers from coming long distances to the Depot, and urging them to attend a Centre nearer to their homes.



Actually some 54 such mothers were advised not to re-attend the Depot but to go to the Centre in their district.

The future of the Milk Depot is bound up with a proposed scheme for a New Health Centre and Health Offices in Belgrave Gate and it was not anticipated in 1931 that the present unsuitable premises would have been occupied for so long a period. But if the present tenancy is likely to be prolonged it will be necessary in the near future to re-organise the work now carried on at the Milk Depot.

**2. Highcross Street Centre.** These premises comprise a three-storey house of eight rooms, five of which are actually in use for Maternity and Child Welfare Work. Two Health Visitors share the work of the Centre and the home visiting to children under five years of age in the surrounding district. One or other Health Visitor is in attendance throughout the day to advise mothers and to weigh the children. Dried milk is also supplied from the Centre. Test feeds are carried out for cases belonging to the district and for those mothers referred by any of the Health Visitors.

The premises are used each week for four clinic sessions—an infant welfare Centre, a 'Toddlers' Clinic, an ante-natal clinic (see page 160) and a post-natal clinic. (The latter is available for mothers who were confined in the Municipal Maternity Home (see page 164).

The details of the infant welfare work of the Centre, expressed numerically, are as follow :—

	1938	1937	1936
Number of new cases .. .. .	97	172	264
Attendances of children under 1 year ..	1,386	2,550	3,054
Attendances of children 1—5 years ..	559	1,116	1,025
Advice to mothers .. .. .	207	201	131
Attendances for Dried Milk, etc. ..	759	1,049	876
Number of Test Feeds carried out ..	95	205	302

Attendances at Clinic Sessions.	<i>Infant Welfare Clinic.</i>		<i>Toddlers' Clinic.</i>	
Number of sessions held .. .. .	51		48	
Attendances of mothers .. .. .	1,811		920	
Average weekly attendance of mothers ..	36		19	
Attendances of children .. .. .	1,819		943	
First visits of children .. .. .	117		55	
Average weekly attendance of children ..	36		20	
Number of medical consultations ..	1,175		688	
Average number of medical consultations per session .. .. .	23		14	

It will be seen that (except for the 'Toddlers' Clinic which was established in November, 1937) the general decrease in the work of this centre, as reported in previous years, continues. This falling off in the number of mothers and children attending has been anticipated, due largely to the re-housing from a slum clearance area of a large portion of the population of this district. Also, mothers who had attended from long distances were advised to go to a Centre nearer to their home.

The number of mothers actually remaining in the vicinity of the Centre is diminishing each month in view of slum clearance, and the proportion of infants in the present population is much smaller than when the Centre was opened by pioneer voluntary workers more than 20 years ago.

The premises are no longer central for the district now served nor are they suitable for the work of maternity and child welfare. A new branch clinic, more suitably situated, is included in the proposed scheme of branch clinics for the city as a whole. Originally these new premises were amongst the earlier ones to be erected but owing to unexpected delay in securing a suitable site, it is now known that the branch clinic will not materialise as soon as was anticipated. While it was previously intended to continue the present system of keeping Highcross Street premises open daily until the transfer to new premises, it is now evident that the position will have to be reviewed at an early date as the daily opening is no longer justifiable.

## ANTE-NATAL CLINICS.

During the year under review, there were no new ante-natal clinics opened as such, but the large attendances and other factors at Braunstone Clinic made it necessary to divide it into two weekly sessions.

At Belgrave Hall Clinic, it was found to be more convenient for the staffing and for patients and midwives attending, to transfer the Friday morning session to Wednesday afternoon.

There are now seven municipal district clinics for expectant mothers. In addition there are two weekly clinics at the Municipal Maternity Home, Westcotes Drive, three weekly sessions at the City General Hospital, three weekly sessions at the Voluntary Hospital, Causeway Lane, and one weekly session for abnormal cases at the Royal Infirmary.

The district clinics are held as follow :—

Braunstone Methodist Church Rooms	Monday,	9.0 a.m.
	„	2.0 p.m.
18, King Street .. .. .	Tuesday	9.0 a.m.
119, Highcross Street .. ..	Wednesday,	9.0 a.m.
Westcotes Maternity Home .. ..	„	9.30 a.m.
Belgrave Hall .. .. .	„	2.0 p.m.
Westcotes Maternity Home .. ..	Thursday,	2.30 p.m.
Uppingham Road Baptist Church ..	Friday	9.0 a.m.
Marriott Road Clinic .. .. .	„	2.0 p.m.

The number of ante-natal sessions held and the attendances during 1938 were as follow :—

(Corresponding figures, where available, for the previous years are in brackets).

Clinic.	No. of Sessions.	ATTENDANCES.			
		First Visits.	Re-Visits.	Total.	Avg. per Session.
Braunstone	48(35)	229(136)	721(347)	950(483)	20
18, King St.	48(47-50)	170(216-222)	449(491-472)	619(707-694)	13
119, Highcross St.	50(49-53)	184(180-167)	625(459-411)	809(639-578)	16
Belgrave Hall	51(47)	254(167)	751(337)	1005(504)	20
Uppingham Rd.	51(47)	186(133)	584(363)	770(496)	15
Marriott Rd.	51(28)	198(96)	592(177)	790(273)	15
Totals	299(253-103)	1221(928-389)	3722(2174-883)	4943(3192-1272)	16.5
Municipal Maternity Home	101(102-100)	342(336-391)	1220(1153-1530)	1562(1489-1921)	15
City General Hospital	—	489	1686	2175	—
Leicester & Leics. Maternity Hosp.	156(154-156)	1086(1101-1044)	4648(4849-4605)	5734(5950-5649)	37
Royal Infirmary	—	209	241	450	—
Totals	556	3347	11517	14864	—



The following are particulars concerning the source of the new patients who attended the *district* clinics :—

(The corresponding figures for the previous year are in brackets).

Clinic.	Referred by								Totals.
	Health Visitors.	Midwives.	Doctors.	Ex-patients or friends.	City General Hospital.	Social Service Workers.	Other Clinics.	Came of own accord.	
Braunstone	40(29)	142 (81)	6 (3)	9 (5)	— (1)	1(—)	3 (6)	28 (11)	229(136)
18, King St.	29(35)	54 (71)	8(27)	20(17)	6(16)	2(—)	15 (4)	36 (46)	170(216)
119, Highcross St.	35(45)	50 (42)	17 (7)	38(26)	7(18)	2(4)	2 (—)	33 (38)	184(186)
Belgrave Hall	24(18)	191(121)	8 (4)	9 (6)	3 (4)	1(—)	4 (3)	14 (11)	254(165)
Uppingham Rd.	46(29)	68 (54)	8 (2)	28 (8)	6 (3)	1(—)	11(21)	18 (16)	186(133)
Marriott Rd.	27(26)	156 (63)	— (—)	1 (1)	6 (1)	—(—)	1 (1)	7 (4)	198(96)
Totals	201(182)	661(432)	47(43)	105(63)	28(43)	7(4)	36(35)	136(126)	1221(928)

The figures for the whole city show that 3,347 new cases, 78 per cent. of the total births notified in the city, attended an ante-natal clinic as compared with 52 per cent. for the previous year. This is an increase of 992 patients and while the total figures show a gratifying increase, it should be mentioned that they include for the first time the attendances at the City General Hospital and the Royal Infirmary. Further, allowance must be made for the fact that some patients (the exact figure is not available) have been included as new patients at more than one clinic, e.g., a patient attending the City General Hospital or Leicester Royal Infirmary may have been referred there from a district clinic. But even when this fact is borne in mind, the figures in general may be considered to be satisfactory for the city. The percentage for the country as a whole (in 1937) was 54.19.

Concerning the individual district clinics, it is noted that the attendances at the more central premises, 18, King Street and 119, Highcross Street, are tending to decrease. This is because of the translation of the population to re-housing estates and is more than offset by the figures for the clinics on the outskirts of the city—viz., Marriott Road, Belgrave Hall, Braunstone and Uppingham Road. From these areas some patients were previously persuaded to make the long journey to King Street or Highcross Street and a study of the

attendances at the district clinics since they were opened two years ago indicates that they were very necessary. Also, the more conveniently-situated clinics have enabled us to deal with the problem of the ante-natal supervision of pregnant women who are going to work. The percentage of female labour in the city is high and there have been difficulties about ante-natal examinations. These difficulties have been largely overcome as far as the women are concerned and personal contact between the clinic doctor and the factory forewoman has resulted in mutual arrangements for the attendances of women during factory hours.

Actually, already some of these new clinics have been overcrowded at some sessions. At Braunstone, it was necessary to arrange for an additional weekly session, which was opened in January, 1939; at Belgrave Hall a crowded morning session on the day of an afternoon Infant Welfare Centre was found to be difficult and was transferred to an afternoon session as being more convenient; at Marriott Road the work is impeded owing to lack of accommodation which it is hoped to remedy by the extension of the existing premises. In fact, it is evident that the inconvenience of the present premises is hampering the routine work so that the opening of our own properly planned clinics will enable us to deal more expeditiously with the increasing numbers.

The analysis of the sources of the new patients who attended the district clinics is interesting as it shows an increase of 229—432 to 661—in the number of patients referred by midwives. Further, it shows that this increase has taken place to the greatest extent in those districts where the midwifery is almost entirely in the hands of the Municipal Midwife, e.g., Belgrave Hall, Braunstone and Marriott Road Clinics. Conversely, the attendances at Uppingham Road Clinic, which district is served by four independent midwives, reflect the attitude of the private midwife to the Municipal clinic. The effect of municipal midwifery upon the attendances at Ante-Natal Clinics will be dealt with more fully under the section dealing with the Midwives' Act.

## POST-NATAL CLINICS.

The establishment of district post-natal clinics is now overdue but the difficulty of suitable premises—with a hot and cold water supply laid on—makes it impossible to open such clinics in conjunction with the existing ante-natal clinics. Further, there should be available a consultative post-natal clinic in connection with any district clinics but again there are no suitable premises available at present. It is hoped that the erection of a central Health Clinic in the near future



will provide these facilities. Meanwhile, it is intended to establish a district post-natal clinic at Cort Crescent Branch clinic when it is opened during 1939, and any women found to require post-natal treatment can be referred to the City General Hospital.

A post-natal clinic in connection with Westcotes Municipal Maternity Home was opened in May, 1938. Patients are informed of the clinic during their stay in the Home and later are offered an appointment to attend the Clinic at a fixed time on a Friday morning at 119, Highcross Street.

The attendances and findings at the clinic for the period May 27 to December 31st, 1938, were as follow :—

Number of patients invited	..	..	..	165
„ „ attending	..	..	..	100
Number of revisits	..	..	..	40
Of the patients examined :—				
Found to be normal	..	..	..	35
Treated at clinic	..	..	..	8
Referred to own doctor	..	..	..	44
Still attending on 31st December, 1938	..			13
			—	100

Of the 44 patients referred to their own doctor, the following information is available :—

Patients treated by own doctor	..	..	..	..	24
„ who attended own doctor but treatment not provided	..	..	..	..	5
„ who left city before being treated	..	..	..		2
„ for whom report is not yet available	..	..			13
				—	44

While it is erroneous to draw definite conclusions from the figures of so short a period as seven months, they have shown us some of the practical difficulties of arranging post-natal work, e.g., though patients are informed verbally and by circular of the scope of this clinic and are later written to offering them a choice of dates with a fixed time appointment on which they may attend, yet 65 out of 165 failed to avail themselves of this service. In some cases, the reason appears to be apathy, but a frequent cause of absence has been the very real difficulty of arranging for the feeding of the baby at the time of the clinic. The question of altering the clinic time from 9.30 a.m. is being kept in mind, though it is not easy to fix any one time that will be generally acceptable.



**BIRTH CONTROL CLINIC.**

The Municipal Birth Control Clinic was opened in March, 1931. A weekly session is held at the clinic premises at 18, King Street, and married women who need the advice on medical grounds are admitted to the clinic.

By arrangement with the Leicestershire County Council, similar patients from their area are eligible for advice at the city clinic.

The following figures refer to the year 1938.

	<i>City.</i>	<i>County.</i>	<i>Total.</i>
Number of patients who sought advice ..	94	50	144
"          "          were accepted for advice .. ..	90	47	137
"          "          were refused advice	4	3	7

Concerning the 137 women accepted for advice, the following are the medical reasons for which the advice was given :—

	<i>City.</i>	<i>County.</i>	<i>Total.</i>
<b>Husband :</b>			
Mental disease .. .. .	1	—	1
Active Pulmonary Tuberculosis ..	1	1	2
Epilepsy .. .. .	1	—	1
<b>Children :</b>			
Hereditary disease .. .. .	2	—	2
<b>Patient :</b>			
Anaemia .. .. .	9	2	11
Gynaecological condition .. ..	9	3	12
Complications of pregnancy .. ..	16	9	25
Complications of labour .. ..	11	7	18
General and nervous debility .. ..	24	18	42
Mental instability .. .. .	3	2	5
Pulmonary Tuberculosis .. ..	3	2	5
Heart disease .. .. .	3	—	3
Kidney disease .. .. .	4	1	5
Various other conditions .. ..	3	2	5

**Cases in which advice was refused.**

In all instances, the reason for the refusal was that there were no medical grounds for contraception. The three refusals from the county were patients who came of their own accord, for ecomonic reasons. Had there been any medical grounds, they would have been referred back in the first instance, to their own doctor, as the arrangement with the County Authority is that all patients must have a medical recommendation before being admitted to the clinic.

### Follow up work.

An attempt to keep in touch with all women advised has been made since the inception of the clinic and as the numbers on the register have increased year by year, this entails a large amount of clerical work. But it is for this follow-up work that the true value of the work of the clinic can be assessed and experience gained as to the difficulties which are encountered by the patients themselves. There are women who seem to think that the mere attendance at the clinic confers upon them an immunity against pregnancy ! Others are indifferent about carrying out the instructions given and take the risk of further pregnancy. But against these, there are many patients who have faithfully carried out the instructions given over a number of years. They show a marked improvement in their general health and happiness, due in no small measure to the freedom from the anxiety associated with pregnancy which would be detrimental to the health of mother or child. It is such patients as these who counterbalance the disappointment associated with those others who will not help themselves and they are the encouragement to continue this work which is an integral part of any scheme for maternity and child welfare.

### TREATMENT AT THE SCHOOL CLINICS.

Arrangements whereby children under five years of age may be referred from the Maternity and Child Welfare Centres for treatment at the School Clinics, as detailed in earlier reports, have continued during the year. All children are referred by medical recommendation and reports are received from the School Medical Officer as to the treatment recommended and/or carried out.

Within the limitations of the School Medical Service Treatment Centres, the scheme works satisfactorily. Difficulties arise when treatment is required by children living in the outlying parts of the city, especially on some of the new housing estates, where there is no district clinic. On the Braunstone Estate, a temporary expedient of treating children on one of the school premises was meeting the situation there. But a request from the School Medical Service to discontinue sending children under five years, owing to overcrowding, has resulted in the majority of these children going without treatment ; the mothers have neither the time nor the money to make the journey—often twice a week—to the central Clinic at Richmond House.

These difficulties will be met by the opening of the proposed branch clinics.

The details of each clinic are given below.

**Dental Clinic.** Two weekly sessions are allocated by the School Dental Surgeon for the treatment of expectant and nursing mothers and children under five years of age, and additional sessions are arranged as the work may demand.

It is now possible to allocate one of the Assistant Medical Officers to give the general anaesthetics for patients who are allocated to special sessions.

Details of the work done during the year are set out below :—

(The corresponding totals for the previous year are shown in brackets).

	<i>Children under 5 years.</i>	<i>Adults.</i>	<i>Total.</i>	
Number of cases treated ..	241	300	541	(439)
Number of attendances.. ..	366	884	1250	(951)
Extractions—Permanent teeth	—	1934	1934	(1312)
Temporary teeth..	454	—	454	(476)
Anaesthetics—Local .. ..	257	188	445	(439)
Gas .. ..	2	88	90	(90)
Fillings—Permanent teeth ..	—	20	20	(17)
Temporary teeth ..	55	—	55	(127)
Scalings .. ..	—	22	22	(32)
Dentures .. ..	—	135	135	(80)
Howes Treatment .. ..	78	—	78	(—)
Prosthetic dressings, etc. ..	2	299	301	(209)
Repairs, etc. .. ..	—	3	3	(5)
Consultations .. ..	23	150	173	(93)
Number of sessions held ..			157	(116)
Number of cases under treat- ment on 31.12.38 .. ..			135	(87)

It will be seen that the number of sessions increased from 116 to 157 making an average of three sessions per week. This was due to the increase in the number of women accepting treatment—300 as compared with 184, with an increase of 54 general anaesthetics given.

The figures relating to the pre-school child show no increase as compared with the previous year. A total of only 241 children treated cannot be considered as satisfactory. The figure is made up almost entirely of children whose parents sought treatment on account of toothache. There is, as yet, no provision for the routine examination of the pre-school child by a dentist. It is hoped that this matter will receive attention when the Dental Services of the School Medical Inspection Department have been more decentralised as part of the proposed scheme of branch clinics.



### **Artificial Sunlight.**

The total number of children treated during 1938 was 271, compared with 288 for the previous year. Of these, 215 were new admissions. The remainder, that is, 56 infants had already received some treatment during 1937.

There were 10 sessions reserved each week for infants. Each child receives, on the average, two courses of three months each, some considerably more. The total number of infants who finished their treatment during the year and were discharged was 100.

As usual, rickets and debility were the chief complaints. A mild degree of malnutrition was observed in many children but no severe cases (marasmus) were sent for treatment.

Only fair results were obtained in cases of dermatitis, acidosis, tuberculous abdomen and in one case of coeliac disease. Slight bronchitis, if part of a general debility, may show improvement in time, but infants with severe cough and dyspnoea should not be sent for treatment.

In the case of infants, 23 were examined but did not return for treatment. Another 43 cases started treatment but gave up after a few weeks.

### **Orthopaedic Clinic.**

There were 176 children under five years of age admitted to the clinic as new cases as compared with 168 in the previous year. Many were referred for diagnosis and advice concerning some deformity, often slight, but of real concern to the parent.

In 93 cases, no treatment was recommended, in 24 cases the treatment advised was remedial, while instruments or appliances were advised for 24 patients. For the remaining 35 cases in-patient treatment was advised.

In addition there were 191 old patients treated at the clinic during the year.

### **Other School Clinics.**

There were 206 children under 5 years of age admitted to the Ear, Nose and Throat clinic, 86 (including five old cases) to the Eyes Clinic and 172 to the Skins and Minor Ailments clinic.

## MIDWIVES.

The Maternity and Child Welfare Medical Officer is the Medical Supervisor of Midwives and is now assisted in the routine work of inspection by one of the full-time Assistant Medical Officers who commenced duties in November, 1937.

During the year 1938, 90 midwives notified their intention to practise. Of these, 21 were Municipal Midwives, 24 were midwives in independent district practice and the remaining 45 were practising in maternity hospitals or maternity homes.

## THE MUNICIPAL MIDWIFERY SCHEME.

Under the provisions of the Midwives' Act, 1936, the Municipal Midwifery Scheme was inaugurated in July, 1937.

In order to determine the number of midwives required, certain factors had to be considered :—

- (1) The number of births occurring in the City and the probable trend of the birth rate during the next few years.
- (2) The use to be made of the alternative midwifery services provided by (a) the Council—maternity beds at the Maternity Home and the City General Hospital; (b) subsidised by the Council—the Leicester and Leicestershire Maternity Hospital, Causeway Lane; (c) private maternity homes and midwives in private practice.
- (3) The number of independent midwives likely to resign voluntarily or to be retired compulsorily during the three years immediately following the passing of the Act.
- (4) The possible number of patients who could adequately be attended by each midwife per annum.

Allowing for a 14 days' puerperium, with morning and evening visits throughout, off duty period, annual leave and sickness, a maximum of 80 patients per annum per midwife was fixed.

When all these factors have been carefully considered, it was decided to appoint twenty midwives with the provision that the number be increased as circumstances required. These were selected from more than 60 applicants. The Act laid down that preference should be given to existing midwives when considering appointments initially and this was done, despite the fact that all of them were over 35 years of age. An additional midwife was considered necessary in December, 1937, and commenced duties during February, 1938.

The names and qualifications of the Municipal Midwives are set out on page vii.

### **Uniform, Equipment, Drugs, etc.**

Each midwife, on appointment, is provided with adequate uniform, equipment, drugs, a travelling allowance, telephone and a professional plate.

### **Holidays and Annual Leave.**

Three weeks annual leave are granted, together with 24 hours off duty each week, one week-end (8.0 p.m. on Friday to 8.0 a.m. on Monday) every four weeks and an additional Sunday every four weeks

### **Sickness Leave.**

Midwives have been granted pay during absence according to the scheme now in operation for all Corporation officials.

### **Salary.**

£170 rising to £200 per annum for State Certified Midwives.

£200 rising to £250 per annum for midwives who are also State Registered Nurses.

### **Superannuation.**

All Municipal Midwives but two were admitted to the Superannuation Scheme following appointment. The two exceptions were deferred on medical grounds and have since been reviewed and will come into the scheme on 1st April, 1939.

### **Midwife Teachers.**

Two of the municipal midwives were approved for district teaching by the Central Midwives' Board under the new training rules. They have undertaken this work with pupils from the Municipal Maternity Home and, in an emergency, from the Voluntary Maternity Hospital.

### **Fees.**

The charges fixed for the services of a Municipal Midwife are :

For attendance as a midwife at a first confinement	..	45/-
„ „ „ subsequent confinement	..	40/-
„ „ „ maternity nurse	.. .. .	35/-
For attendance at an abortion	.. .. .	2/6 per day

### **Remission of Fees.**

Provision is made for the remission or modification of these fees in necessitous cases, based on a consideration of the family income.



Applications are considered by the special sub-committee dealing with all necessitous cases under Maternity and Child Welfare.

Of the Municipal Midwives appointed in Leicester, all but two were previously in private practice in the City. At the commencement of the scheme two removals were arranged, two midwives were allocated to a rehousing area and later two midwives were instructed to move their dwellings in order to facilitate the working of the scheme.

For the purposes of administration, the City was divided into eight areas. Six areas are served by a team of midwives, while in two areas there is only one midwife. As far as possible, midwives confine their bookings to their own area though they are not strictly limited to their area. In this way it is easier to maintain the team work and to ensure to the patient that a second midwife is available, should the first midwife not be available when required. Midwives were instructed to book not more than 25 patients in any three consecutive months, or nine in any calendar month; any excess bookings are transferred to other members of the team.

In addition to the requirements of the Central Midwives' Board, Municipal Midwives are also required to keep an adequate diary and to complete a monthly return of all work undertaken. In this way it is possible to know at any date how the scheme is progressing in relation to each individual midwife and each area.

Municipal Midwives attend regularly at the Ante-Natal Clinics with their patients and reference to page 161 of this report will show that the attendances of patients at these Clinics have increased considerably since the Midwives' Act came into force. There are now comparatively few women who are not examined by a doctor, either privately or at the Clinics, during pregnancy, if they have engaged the services of a Municipal Midwife.

Periodic staff meetings are held at the Health Offices between the Medical Supervisor of Midwives and the Municipal Midwives. These afford opportunity for the midwives to keep in touch with each other and for directions and discussions on various practical matters connected with the working of the scheme.

The following table shows the number of cases taken and visits paid by municipal midwives during the year 1938.

Cases attended.	Visits.		Total (Visits).
	Post-Natal.	Ante-Natal.	
1,059	27,166	5,559	32,725

It will be seen that the average number of cases per midwife is 50, which is considerably below the maximum figure of 80—which was fixed at the commencement of the scheme. A detailed survey of the work of each midwife and each district has been made in connection with a general survey of the entire scheme. From that survey the following observations are made :—

It would seem that it will NOT be possible for all midwives within one area to work up to the maximum of 80 cases, as in practice it has been proved that the actual number of cases attended or visits paid is not always a true indication of the amount of work put in by the individual midwife. Such matters as the proportion of first babies, and therefore longer hours in labour, facilities available at the home, the distance to be travelled by the midwife and the fact that the very nature of the work makes it impossible to group it or to space it, these factors inevitably result in very busy and then comparatively slack periods of work.

Theoretically it may seem possible for a midwife, with but little work, to relieve in an area where the pressure of work is greater, but, in practice, this has resulted in certain difficulties, for example, a midwife working alone in an area has been called upon to relieve at some distance, during which time one of her booked patients has gone into labour, resulting in undesirable delay in attending upon the woman in labour and some natural hesitancy on the part of other pregnant women to engage the services of a midwife who may not be near at hand when required.

In connection with the experiment of allocating certain Municipal Midwives to the Municipal Maternity Home, as a temporary measure, to relieve the shortage of nurses there, similar difficulties were encountered. It therefore seems that the better policy in connection with midwives who have not yet booked a large number of cases is for them to remain in the area allocated to them and to allow a reasonable time for them to work up a practice.

Previous mention has been made of some of the factors which were considered in arriving at an estimate of the number of municipal midwives who would be required.

- (1) The number of births occurring in the City. It was assumed that there would be no appreciable reduction in the total births.
- (2) The number of births which would take place in the Municipal Maternity Hospital or Home.



While the figures for the Maternity Home show no appreciable variation, as the Home is working to full capacity, the number of cases delivered in the City General Hospital rose from 330 in 1937 to 552 in 1938. This is again a record figure and it is impossible to forecast whether the increase will continue. In 1933 the number of cases was 134. It is the experience of the Municipal Midwives and the doctors at the Ante-Natal Clinics that many of these patients elect to go into the City General Hospital for financial reasons, though there is now no hesitation on the part of all classes of patients, necessitous or otherwise, in seeking admission.

The following particulars indicate the place of birth of the total births notified during 1938.

No. of births notified .. .. .	4594
Notifications received from Municipal Midwives ..	1024
Notifications received from independent midwives ..	648
City General Hospital .. .. .	552
Westcotes Maternity Home .. .. .	391
Leicester and Leicestershire Maternity Hospital ..	885
Leicester and Leicestershire Maternity Hospital district cases .. .. .	96
Leicester Royal Infirmary .. .. .	145
Private Maternity Homes, etc... .. .	692
Medical Practitioners .. .. .	100
<hr/>	
Total .. .. .	4533
<hr/>	

This figure, 4,533, is the number of cases notified and the difference of 61 is accounted for by twin and other multiple pregnancies.

These particulars are not available for previous years so that comparison is not possible.

- (3) Resignation of independent midwives. Actually eight midwives resigned voluntarily up to December, 1938, and there were two resignations early in 1939. The final number cannot be known till after the last day on which a midwife can retire on compensation, i.e., the end of July, 1939. It is anticipated now that some 20 midwives will remain in private practice, many of them doing maternity work only.

There has been no recommendation that any of these midwives should be asked to retire—which would mean compensation at a higher figure than that paid for voluntary retirement.

# HANDYWOMEN.

When the Midwives' Act was put into operation in July, 1937, there were in Leicester some 70 women known to various members



of the department who had, at some time, engaged in maternity work in the city. In response to an enquiry sent out to them 22 did not reply, 27 replied that they were not practising and the remaining 21 replied that they intended to continue in practice as long as they were legally permitted to do so.

In response to an application made in November, 1938, the Ministry of Health has made an order, which will come into force on 1st April, 1939, which prohibits thereafter the employment of any but qualified persons to attend for gain any woman in childbirth.

Although the exact number of cases attended by these handywomen is not obtainable, it is reasonable to suppose that the order prohibiting them from practising should result in increased work for the trained district midwife.

While no dramatic results were claimed originally for the Midwives' Act, 1936, its operation has resulted in the following benefits to the patient.

- (1) More general ante-natal supervision. The figures for ante-natal clinic attendances for 1938 show a very large increase.
- (2) Certainty concerning the prompt services of a midwife—one or other member of the team—at the onset of labour and throughout the labour. The number of cases where a midwife was unable to arrive until after the birth of the child (a very undesirable happening) has considerably decreased.
- (3) More frequent and more regular morning and evening visits during the lying-in period.
- (4) A higher standard of midwifery with more uniformity as to methods.

As to the midwives themselves, they will benefit by—

- (1) A general raising of the standard of their work, with the use of masks, gloves, gowns, etc., bringing their methods up to date.
- (2) Facilities for obtaining a relief midwife during any emergency, thus enabling the midwife to concentrate on any one patient whom she may have to attend for several hours continuously.
- (3) The advantages of team work which does away with the isolation of private practice.
- (4) Fixed leisure—certainly an advantage to the midwife and indirectly to the patient who will have the services of a midwife not worn out by long hours of duty or anxiety concerning other patients.

The administration of the Municipal Midwifery Scheme in Leicester has presented many problems which could not have been anticipated, but the following summary of the work after 18 months may give some indication of the future of the scheme :—

- (1) The report of the Ministry of Health survey of the Leicester Municipal Midwifery Scheme last November contained no adverse criticism.
- (2) The 14 days instead of 10 days lying-in period has limited the number of cases which can be adequately undertaken.
- (3) The Central Midwives' Board's post-graduate requirements will deplete the scheme of 12 working weeks per annum.
- (4) The age of the existing staff indicates that their working capacity and good health will tend to diminish in the next few years.
- (5) The prohibition of handywomen from 1st April, 1939, should result in increased work for midwives and it is hoped for municipal midwives. It may seem paradoxical but if midwives were *now* working to full capacity, then the Order prohibiting handywomen might not have been made as there would not have been existing adequate provision to undertake their work.
- (6) After 30th July, 1939—the last day on which a midwife may retire on compensation—it will be possible to form a more definite opinion than has hitherto been possible, of the number of midwives who intend to remain permanently in independent practice.
- (7) The present scheme has been in operation for only 18 months—with but one full calendar year's working. This is a comparatively short period in the life of a scheme which was a new departure in the control of district midwifery. It was impossible to forecast accurately its workings. Certain factors, e.g., under (2), (3) and (4) tend to modify the original estimate of work, while, in time, certain other factors, e.g., under (5) and (6) should increase the amount of work to be undertaken by midwives under the scheme.
- (8) Already, even at this early stage in the life of the scheme, it has resulted in definite benefits to the patients and these will be a permanent feature of the scheme.

## OBSTETRIC CONSULTANTS.

Concerning a second medical opinion, Memo 156/MCW of the Ministry of Health authorises the services of a consultant and these



are available from a panel prepared by the Local Authority, in all cases of difficulty arising ante-natally or during confinement or the lying-in period.

During 1938, a consultant was called in to 20 cases, two ante-natal, 13 natal and five post-natal emergencies. The nature of the emergencies was as follow :—Hydronephrosis of kidney 1, Post maturity 1, Retained placenta 2, Premature labour 1, Placenta praevia 2, Disproportion at term with albuminuria 1, Delayed labour 2, Difficult labour 5, Pyrexia 3, Puerperal Sepsis 1, Retention of urine 1.

### **EMERGENCY MATERNITY SERVICE.**

During 1937, a scheme (by arrangement between the Health Committee and the Royal Infirmary) was put into operation which enables an obstetric consultant to obtain further assistance if necessary, e.g., to combat shock or haemorrhage in a patient who may be too ill for removal to hospital. In such circumstances, a telephone message to the Royal Infirmary for the "Emergency Maternity Service" will bring immediately the assistance of a fully-trained nurse midwife who will have with her in the ambulance a complete sterile outfit for any necessary treatment which can be carried out in the patient's home.

These additional facilities will thus make complete the scheme for the treatment of all obstetric complications wherever they may occur. It was not anticipated that frequent demands would be made on this service and actually it was called into use only on one occasion during the year under review.

### **PUERPERAL PYREXIA.**

During the year there were 120 notifications of Puerperal Pyrexia

The attributable causes in the 120 cases of Puerperal Pyrexia were : Septicaemia 7, Sepsaemia 14, Spontaneous abortion 14, Complicated labour 18, Phlebitis 5, Multiple pregnancy 2, Haemorrhage 3, Breast engorgement 1, Breast inflammation 8, Pyelitis 1, Intercurrent disease 12, Obscure origin 35.

It will be seen that in 35 cases the pyrexia was of obscure origin, but one of the objects of the notification of Puerperal Pyrexia is that these cases should be investigated and kept under observation until a diagnosis is made or the condition has subsided. In this way, it is intended that no possible source of puerperal infection should be overlooked. Actually, new Regulations to come into force on the 1st April, 1939, have been drafted to emphasize this point.



PUERPERAL PYREXIA

Notifications and Result of Treatment.  
1938.

RESULT OF TREATMENT					TREATED AT							CONFINED AT				
Died at					Recovered at											
Home.	Maternity Home or Hospital.	City Isolation Hospital.	City General Hospital.	Royal Infirmary.	Home.	Maternity Home or Hospital.	City Isolation Hospital.	City General Hospital.	Private Hospital.	Royal Infirmary.	Home.	Maternity Home or Hospital.	City Isolation Hospital.	City General Hospital.	Private Hospital.	Royal Infirmary.
57	52	4	3	4	7	36	67	4	3	3	7	36	67	4	3	4
—	—	4	—	—	—	36	63	4	3	3	—	—	—	—	—	—

The table on page 177 sets out various data of interest concerning these patients. No less than 67 of the 120 cases of Puerperal Pyrexia were transferred to the City Isolation Hospital which admits all cases of Pyrexia of doubtful origin, as well as cases of diagnosed sepsis. This procedure has been encouraged for some years now, both in domiciliary cases and in those occurring in maternity homes, where facilities for isolation and special treatment are often lacking. The opening in 1938 of a specially-built cubicle block at the Isolation Hospital for these cases will greatly facilitate this important work.

### MATERNITY BED ACCOMMODATION IN THE CITY.

The maternity bed accommodation within the city is provided by :—

				Maternity Beds.	Ante-natal Beds.	Confinements during 1938.
Health Committee.	{	Westcotes Maternity		22	3	391
		Home				
		City General Hospital		26	as required	552
Leicester and Leicestershire						
Maternity Hospital		..	45	6	901	
Royal Infirmary		.. .. .	14	as required	255	
Fielding Johnson Private Hospital			11	—	160	
Various Nursing Homes		..	93	—	568	
				<hr/>		<hr/>
Totals		.. .. .	211		2827	
				<hr/>		<hr/>

It will be appreciated that a proportion of the patients among the above are from the county and the figure quoted below for notified births includes such births which took place in Institutions.

Total number of births notified in the city during 1938 ..	4594
Number of births in Institutions during 1938 .. ..	2827
Percentage of births in Institutions .. .. .	61.5

For the past five years, the figures are as follow :—

	1934	1935	1936	1937	1938
No. of births notified .. .. .	3627	4024	4247	4518	4594
No. of births in Institutions .. ..	2151	2321	2580	2724	2827
Percentage of Births in Institutions ..	59.3	57.6	60.7	60.3	61.5

The number of confinements which occurred in the various Institutions is as follows :—

	1934	1935	1936	1937	1938
Westcotes Maternity Home .. ..	410	394	467	393	391
City General Hospital	205	231	222	330	552
Leicester & Leicestershire Maternity Hospital	770	843	903	940	901
Royal Infirmary ..	264	344	313	375	255
Fielding Johnson Private Hospital ..	119	113	112	115	160
Various nursing homes	383	396	563	571	568
Totals ..	2151	2321	2580	2724	2827

**Westcotes Maternity Home** has worked to full capacity during the year and it has been necessary to refuse bookings.

**City General Hospital.** The yearly increase in the number of admissions, following the “appropriation” of this hospital by the Health Committee in 1929, showed a marked rise during the year from 330 to 552. As reported elsewhere, many more patients are now availing themselves of the facilities offered in the Maternity Ward of this hospital, though it is impossible to say whether this increase will continue.

**Leicester and Leicestershire Maternity Hospital.** The number of confinements for 1938 shows a decrease of 39 as compared with the previous year. It is known that some patients have cancelled their bookings and transferred to the City General Hospital for financial reasons.

The fees of the Hospital have been slightly raised and the increased grant of £1,200 made by the Health Committee (with increased representation of the Health Committee on the Hospital Committee) continues, but the finances of the Hospital are still in an unsatisfactory condition.

**Leicester Royal Infirmary.** The maternity ward of 11 beds was opened in February, 1935, and is intended for abnormal pregnancies.

The number of confinements in the maternity ward during 1938 was 240 and some 15 patients were transferred to other wards in an emergency. This accommodation for the abnormal maternity case is meeting the need of the city (and some county districts) and the



proposed isolation block in association with this ward should make complete this maternity unit.

**The Fielding Johnson Private Hospital** provides 10 to 13 maternity beds and there were 160 confinements there during 1938.

**Various other Nursing Homes.** The figures under this heading do not show any marked variation during recent years.

From a survey of the City as a whole, it seems that it is adequately provided with maternity beds, except for the area served by Westcotes Home, assuming that there is no marked increase in the number of patients who are confined in Institutions. It is not possible to forecast with certainty what effect on the number of confinements in Institutions will follow the introduction of the Municipal Midwifery Scheme. The trend during the last five years has been towards maternity homes.

### **MUNICIPAL MATERNITY HOME.**

This Home, which was opened in 1920, provides 22 maternity and three ante-natal beds.

The number of confinements at the Home during 1938 was 391, the corresponding figures for the previous years being

1934	1935	1936	1937
410	394 (103)	467 (87)	393 (76)
(County patients in brackets).			

The figure of approximately 400 patients per annum is the maximum limit of the Home. It has worked to full capacity at many periods during the year and from time to time it has been necessary to refuse to book patients who have applied to come into the Home.

The ante-natal clinic is held at the Home for two sessions each week and the attendances are recorded on page 161. As patients are allowed to be attended in the Home by their own doctor, the total new cases attending the ante-natal clinic is less than the number of confinements in the Home. Actually, it is exceptional for a patient not under her own doctor to fail to attend the clinic and the follow-up system in operation ensures that all booked patients make their first and subsequent attendances at the clinic. In fact, the regularity of such attendances, often entailing long and difficult journeys has always been a marked feature of the ante-natal work at the Home.

A tabular statement of the work done at the Home is given on page 181. It will be noticed that there were no maternal deaths in the Home during the year, the last one occurring there in 1933.

**TABLE 18.**  
**MUNICIPAL MATERNITY HOME,**

Return relating to Maternity Homes maintained or subsidised by  
the Council, as required by the Ministry of Health, for year 1938.

FORM M.C.W. 96a.

1. Name and address of Institution :—	
Municipal Maternity Home, Westcotes Drive, Leicester.	
2. Number of beds in the Institution (exclusive of isolation and labour beds) .. .. .	25
2a. Number of beds, if any, included under item 2 which have been allocated to, and reserved for, expectant mothers in need of Hospital treatment .. .. .	3
3. Number of maternity cases admitted during the year—	
Admissions	391
Patients	422
3a. Number of women treated during the year in the beds shown against item 2a. (These women should be included also against item 3) .. .. .	27
4. Average duration of stay of cases included against item 3..	14.9 days
5. Number of cases delivered by :—	
(a) Midwives .. .. .	276
(b) Doctors .. .. .	115
6. Number of cases in which medical assistance was sought by a midwife in emergency .. .. .	147
7. Number of cases notified as—	
(a) Puerperal Fever .. .. .	—
(b) Puerperal Pyrexia .. .. .	12
8. Number of cases of pemphigus neonatorum .. .. .	—
9. Number of infants not entirely breast-fed while in the Institution .. .. .	24
10. (a) Number of cases notified as ophthalmia neonatorum..	1
(b) Result of treatment in each case. Improved on discharge, under care of own doctor, and district nurse at home.	
11. (a) Number of maternal deaths .. .. .	none
(b) Cause of death in each case.	—
12. (a) Number of infant deaths—	
(i) Stillborn .. .. .	17
(ii) Within 10 days of birth .. .. .	5
(b) Cause of death in each case and results of post-mortem examination (if obtainable)—	
Prematurity .. .. .	3
Intercranial haemorrhage .. .. .	1
Shock following breech delivery .. .. .	1

There were 12 cases of puerperal pyrexia notified, but in none of them was there any pathological evidence of infection with the haemolytic streptococcus—the causal organism of Puerperal Fever. It is a routine measure to transfer all cases of Pyrexia of doubtful origin to the City Isolation Hospital, as the Home has neither staff nor facilities for the nursing of isolation or observation cases.

There were 17 stillbirths and 5 infant deaths in the Home, the causes of death being prematurity 3, shock 1, intercranial haemorrhage 1.

### **Pupil Midwives.**

The Home has always been an approved training school for pupil midwives. Under the new scheme of training (referred to elsewhere in this report) in accordance with the new regulations of the Central Midwives' Board, the Home is now approved only for the second part of training. The lengthening of the period of training has created a shortage of pupils, which, however, may be of a temporary nature. But the approval of Westcotes Home for the second part of training only, has created a problem of staffing which will not be solved should the number of pupils increase. The supply of pupils would be intermittent and only for two periods of three months during any one year, which would not contribute to any appreciable extent towards the adequate staffing of the Home. It is, therefore, inevitable that the Home should be staffed in the main by paid-trained and assistant staff in future. This will mean varying grades of nursing staff. The present accommodation has proved inadequate and unsuitable even for temporary staff in training; it will be almost impossible to retain permanent staff unless some additional accommodation is provided promptly as a temporary expedient.

During the year 12 general-trained nurses and one untrained person were accepted for training.

Eight pupils were in training at the beginning of the year, and seven pupils were in training at the end of the year. Of the 14 pupils who sat for the examination, nine were successful in obtaining the certificate of the Central Midwives' Board.

### **Staff.**

Dr. T. W. Allen has been Medical Officer on call for the Home since it was opened in 1920. From 1st April, 1938, the terms and duties of his appointment were revised so as to include the ante-natal clinic work, a routine daily visit to the Home, and medical responsibility for all patients who are not attended by their own doctor. Further, he conducts the post-natal clinic, established in 1938, for



those patients who have been confined in the Home. Details of the work of the Post-Natal Clinic will be found elsewhere in this report.

For these services, the part-time Medical Officer concerned receives a fixed salary in lieu of a retaining fee and patients' fees. The new arrangement has worked well since its inception in April, 1938, and makes for a continuity and co-ordination of the medical work at the Maternity Home.

## **TRAINING OF PUPIL MIDWIVES.**

The training of Pupil Midwives in Leicester had previously been under the aegis of the University College, but since the revision of the scheme necessitated by the new Central Midwives' Board Rules a specially appointed sub-committee of the College Council has taken over the entire control of the work of training pupils in midwifery. On this Committee are representatives of the Health Committee of the City and County.

Under the new rules of the Central Midwives' Board, pupil midwives who are State Registered Nurses must undergo twelve months' training, divided into two periods of six consecutive calendar months. Pupils who are not State Registered Nurses must undergo two years' training, divided into two periods, the first being eighteen consecutive calendar months and the second six consecutive months.

The following hospitals in Leicester have been approved as training schools in—

- (a) For the first period of training—

The City General Hospital and the Leicester and Leicestershire Maternity Hospital.

- (b) For the second period of training—

Westcotes Maternity Home, together with district training.

The scheme itself is an attractive one which has the full approval of the Central Midwives' Board and it is hoped that the present shortage of pupils is only of a temporary nature following the recent lengthening of the period of training.

## **REGISTERED NURSING AND MATERNITY HOMES.**

A list of registered Nursing and Maternity Homes within the City, at the end of 1938, is given on the next page.

There was one new home registered during the year for two medical patients.

The registration of one Home—two maternity beds—was cancelled following the retirement of the person registered.

TABLE 19.

**LIST OF REGISTERED NURSING HOMES**  
(INCLUDING MATERNITY HOMES.)

ADDRESS.						NO. OF BEDS.
9 Mere Road	..	..	..	..	..	1
38 Cromford Street	..	..	..	..	..	1
58 Loughborough Road	..	..	..	..	..	6
66 Uppingham Road	..	..	..	..	..	4
56 Clarendon Park Road	..	..	..	..	..	15
348 Aylestone Road	..	..	..	..	..	15
22 Vicarage Lane	..	..	..	..	..	3
306 Aylestone Road	..	..	..	..	..	2
Stoneygate Nursing Home, Stoneygate Road	..	..	..	..	..	10
Southfields Nursing Home, 84 Regent Road	..	..	..	..	..	4
"South View," Humberstone Lane	..	..	..	..	..	2
39 Scraftoft Lane	..	..	..	..	..	4
"Broadview," Goodwood Road	..	..	..	..	..	5
337 Fosse Road North	..	..	..	..	..	14
"Clifton Nursing Home," 58 Fosse Road Central	..	..	..	..	..	7
Central Nursing Home, 6 University Road	..	..	..	..	..	15
350 Aylestone Road	..	..	..	..	..	8
The Laurels, 185 Uppingham Road	..	..	..	..	..	8
Sundial Nursing Home, Aylestone Road	..	..	..	..	..	12
85 Narborough Road	..	..	..	..	..	7
346 London Road	..	..	..	..	..	2

All Homes are inspected periodically by the Maternity and Child Welfare Medical Officer, who is also in constant touch with Homes which admit maternity patients, especially when any emergency arises.

The accommodation and facilities vary considerably as there are still in existence Homes which were granted registration when the registration first became compulsory in 1926. The number of such Homes is decreasing each year, as the persons registered retire voluntarily and no new application for registration is granted, especially for maternity beds, unless a high standard of efficiency and accommodation is ensured.

Concerning the ascertainment of homes which may not be registered, this matter is kept constantly before the Health Visitors and also any births which take place at addresses other than home addresses are carefully scrutinised and followed up.

**MATERNAL MORTALITY.**

During the year there were nine maternal deaths registered. The cause of death was puerperal sepsis in five cases and there were four deaths from “other accidents and diseases of pregnancy and parturition.”

This gives a rate of 2.25 per 1,000 live and still births (as compared with 1.27 in 1937) and a puerperal sepsis rate of 1.25 (as compared with 1.27 in 1937).

The figures for England and Wales for 1938 are a maternal mortality rate of 2.97 and a puerperal sepsis rate of 0.86 per 1,000 live and still births.

It will thus be seen that the total rate for the City compares favourably with that for the country as a whole.

The following table sets out the total and the sepsis rates for the City for the last five years :—

**MATERNAL DEATHS AND DEATH RATES FOR FIVE YEARS  
1934-1938.**

	1934	1935	1936	1937	1938
<b>Puerperal Sepsis :</b>					
Deaths . . . . .	8	8	9	5	5
Rate per 1,000 total births	2.3	2.1	2.3	1.3	1.25
<b>Non-Sepsis :</b>					
Deaths . . . . .	11	14	4	—	4
Rate per 1,000 total births	3.1	3.8	1.0	—	1.0
<b>Total Maternal Deaths :</b>					
Deaths . . . . .	19	22	13	5	9
Rate per 1,000 total births	5.4	5.9	3.3	1.3	2.25



Through the cordial co-operation of the various members of the medical profession, it has been possible to obtain the fullest details concerning the pregnancy and confinement in all these cases.

The following is a brief history of each case.

- (1) A married woman, aged 41 years, pregnant for the seventh time, had an abortion for which she did not seek any skilled attention. Some days later she called in her doctor for a condition which was diagnosed as phlebitis. She became suddenly worse in 24 hours with all the signs of sepsis and she died soon after admission to hospital.  
Post mortem examination did not reveal any signs of illegal interference.
- (2) A married woman, aged 33 years, pregnant for the first time, was under medical care continuously during pregnancy and appeared to be progressing satisfactorily. She became acutely ill at the seventh month with eclamptic fits. Medical treatment was promptly available and the patient appeared to respond. She was transferred to Hospital for further treatment but the condition recurred with increased severity and she died 48 hours after admission to hospital.
- (3) A married woman, aged 39 years, had five previous pregnancies. She booked a midwife early in pregnancy and attended an antenatal clinic once. She refused treatment for varicose veins and septic teeth. Labour was uneventful. On the 10th day there were signs of mild phlebitis for which the patient was removed to hospital on the 14th day. She became rapidly worse and in spite of intensive treatment died three days later. Post mortem examination revealed pelvic peritonitis.
- (4) A married woman, aged 27 years, had a normal pregnancy and labour. She was confined in a private nursing home and discharged apparently well after 14 days. One week later, she was taken seriously ill and removed to hospital where she died within a few days. The cause of death was "Puerperal sapraemia, sub-acute nephritis, encephalitis."
- (5) A married woman, aged 28 years, with a history of severe haemorrhage at a previous confinement, was under supervision throughout pregnancy but refused all offers of treatment for anaemia and advice re hospital for confinement. Labour was normal but the patient did not seem to rally and medical aid was promptly obtained. She responded to treatment but later she collapsed and died within a few minutes. The cause of death was "Uterine haemorrhage, semi-adherent placenta, anaemia."

- (6) A married woman, aged 40 years, had eight living children and then a series of abortions which she admitted "were brought on by drugs." She was widowed in 1936 and had a further miscarriage from which she recovered. Her last miscarriage commenced some days before she summoned medical aid. She was already seriously ill and was removed to hospital. At first she responded to treatment but later developed pneumonia and then died suddenly of a pulmonary embolism.
- (7) A married woman, aged 22 years, with two living children, had an illness of several days, during which there was no suspicion of pregnancy. She was removed to hospital for treatment but died within 24 hours of "Streptococcal septicaemia, septic abortion, malignant endocarditis.
- (8) A married woman, aged 39 years, had a third confinement which appeared normal. She was up on the 10th day, complained of sudden breathlessness and died within a few seconds. The cause of death was "Pulmonary embolism."
- (9) A married woman, aged 22 years, was in hospital three times during pregnancy for toxæmia. The confinement was normal and the patient was discharged apparently well. She was admitted four weeks after confinement with signs of pelvic peritonitis and nephritis. She died in an uraemic coma.

An analysis of these nine deaths shows that in four patients, numbers 1, 3, 5 and 6, lack of intelligent co-operation of the patient must be considered as a contributory factor.

In cases 2, 4, and 8, the fatal termination was unexpected, and, in the present state of our knowledge, unpreventable.

## INFANT MORTALITY.

There were 178 deaths in infants under one year during 1938. The corrected number of births was 3,873 which gives an infant death rate of 45.95. The infant mortality rate for England and Wales was 53 and for Great Towns 57.

The corresponding figures for 1937 were 238 deaths with an infant death rate of 62.52 as compared with a rate of 58 for England and Wales and 62 for the Great Towns.

The rate of 45.95 is the lowest one ever recorded for the City. The infant death rate has been fluctuating between 52 and 74 during the last 10 years. Having reached the lowest figure of 52 in 1934, there has been a gradual increase up to 62.5 in 1937, so that a reduction in 1938 to 45.95—the lowest figure on record—is very gratifying.

TABLE 20. City of Leicester.

INFANT MORTALITY DURING THE YEAR 1938.

Net Deaths from stated Causes at various Ages under 1 year of Age.

CAUSE OF DEATH.	Under 1 Week	1 to 2 Weeks	2 to 3 Weeks	3 to 4 Weeks	Total under 1 Month	1 to 3 Months	3 to 6 Months	6 to 9 Months	9 to 12 Months	Total Deaths under 1 Year
All Causes Certified.	88	11	9	3	111	31	18	11	7	178
Congenital Malformations..	14	2	2	—	18	6	—	1	1	26
Birth Injuries .. ..	14	2	1	—	17	—	—	—	—	17
Atelectasis .. ..	6	1	—	—	7	—	—	—	—	7
Atrophy, Debility and Marasmus .. ..	4	1	2	—	7	1	—	—	—	8
Premature Births .. ..	46	4	2	3	55	8	—	—	—	63
Diarrhoea, etc. .. ..	—	—	—	—	—	9	7	2	1	19
Convulsions .. ..	1	—	—	—	1	—	—	—	—	1
Icterus Neonatorum ..	—	1	1	—	2	—	—	—	—	2
Pemphigus Neonatorum ..	—	—	—	—	—	—	—	—	—	—
Rickets .. ..	—	—	—	—	—	—	—	—	—	—
Pink Disease .. ..	—	—	—	—	—	—	—	1	—	1
Tuberculous Meningitis ..	—	—	—	—	—	—	—	—	—	—
Abdominal Tuberculosis ..	—	—	—	—	—	1	—	—	—	1
Other Tuberculous Diseases	—	—	—	—	—	—	1	1	1	3
Meningitis. (Not Tuberculous) .. ..	—	—	—	—	—	1	—	—	—	1
Bronchitis .. ..	1	—	—	—	1	—	1	—	1	3
Pneumonia (all forms) . . .	—	—	—	—	—	4	5	4	1	14
Whooping Cough .. ..	—	—	—	—	—	—	1	—	1	2
Measles .. ..	—	—	—	—	—	—	—	1	—	1
Cerebro Spinal Fever ..	—	—	—	—	—	—	—	—	—	—
Erysipelas .. ..	—	—	—	—	—	—	—	—	—	—
Diphtheria .. ..	—	—	—	—	—	—	—	—	—	—
Suffocation .. ..	2	—	—	—	2	—	1	—	—	3
Other Causes .. ..	—	—	1	—	1	1	2	1	1	6

Net Births in the Year { legitimate, 3,672.  
illegitimate, 201.

Net Deaths in the Year of { legitimate infants, 161.  
illegitimate infants, 17.



A detailed investigation is made into every infant death and in this way valuable information is obtained which it is hoped will lead to a permanent reduction in the number of children who die during the first year of life.

The cause of death and age incidence are set out in Table 20, and an analysis of this Table and data as to sex reveals the following facts :—

- (a) 105 male infants died as against 73 female infants.
- (b) Of the 178 deaths, 88, i.e., 49 per cent., occurred during the first week of life and 111, i.e., 62 per cent., occurred during the first month of life.
- (c) Prematurity alone accounted for 63, i.e., 35 per cent. of the total deaths as compared with 28 per cent. of the total deaths in 1937.
- (d) There were 26 deaths from congenital defects.

From a study of the above facts it would seem that the chief factor which maintains the infant death rate is prematurity, which alone accounted for one third of the infant deaths. The causes of prematurity are numerous, but there is reason to hope that more adequate ante-natal supervision will lead to its prevention in many instances.

It is in this connection that much is expected of the Midwives' Act, 1936. Ante-natal supervision—medical and by the midwives—has already increased greatly and its results should be apparent in due course.

Also, it is now being urged that those infants born prematurely into homes which cannot provide the constant and skilled attention needed shall be removed to hospital, where their chances of survival are greatly increased.

But mention must be made of the part played by the Health Visitors in connection with the reduction of infant mortality. More than half the infant deaths occurred within two weeks of birth, i.e., before the Health Visitor takes over the supervision and the reduction in the total number of deaths during 1938 is due to a decrease during the age period of one month to one year. In 1937 there were 121 deaths in infants over one month old. In 1938 the number was 67 and it is fair to attribute some of this improvement to the valuable work done by the Health Visitor in her domiciliary supervision and in encouraging attendance at the Infant Welfare Centre.

## DAY NURSERY.

The Corporation took over the work of the Leicester Day Nursery Society in July, 1920, and moved to the present premises in St. Martin's

in 1923. They have the merit of being central and of having a piece of ground available as an open-air playground, etc., for toddlers and babies. But the premises themselves are neither convenient nor adequate for the purposes of a Day Nursery and it is hoped that better accommodation will be available for this important work.

The Nursery at present provides daily accommodation for 50 healthy babies whose mothers are compelled to go to work.

### **Attendances.**

The Day Nursery was open during the year for 236 full days and 46 half days (Saturdays). The total full-day attendances were 8,547 and the half-day attendances were 1,490 as compared with 9,560 and 1,821 respectively for the previous year. This slight decrease in total attendances is due to the fact that the Day Nursery was closed for one week early in the year. This was done as a precautionary measure owing to infectious illness amongst the staff. Further, it was considered practicable to close the Nursery for a longer period than hitherto at Christmas, as it had been found that attendances were very small when the factories were closed. The average daily attendances throughout the year have been maintained, in fact, on more than one occasion there have been over 60 children at the Nursery. This is only permitted when there is fine weather and a certain percentage of children who do not require to be hand fed.

The demands on the Nursery are still as great as ever in spite of the fact that much of the population in the centre of the City has been re-housed on outlying estates. Many mothers have had to make other arrangements, e.g., with relatives or neighbours or send their toddlers to any available nursery class, as the one central nursery is not adequate for the entire city. But the nursery class does not provide for the infant and ex-baby and these early months and years are very important for a child, especially when the mother has to go out to work. Further, the nursery is open from 7.30 a.m. to 6.30 p.m. so that the children are under supervision throughout the whole period that the mother is at work.

Mothers who are breast feeding their children are encouraged to return to the nursery for this purpose during the dinner hour, when they are provided with a nutritious mid-day meal for a very modest sum.

The Maternity and Child Welfare Medical Officer pays frequent visits to the Nursery and undertakes the periodic examination of all children attending regularly. She is also in close touch with the Matron concerning any emergencies and doubtful cases of admission.



## **The Teaching of Mothercraft.**

The Day Nursery affords excellent opportunity for the training of Nurses.

There is always a long waiting list of girls wishing to become probationers and invariably they obtain good posts after their training. During the year the four probationers who sat the prescribed examination obtained the advanced certificate of the Society of Day Nurseries.

In addition, by arrangement with the Education Committee, school girls attend in groups of not more than eight, one group attending in the mornings and one in the afternoons, each group attending for a period of two weeks.

The total attendances were 2,592, made by 281 schoolgirls drawn from the following schools :—Avenue Road, Elbow Lane, Folville Rise, Holy Trinity, Sir Jonathan North, Linwood Lane, Mantle Road, Narborough Road and Willow Street.

Miss F. Berkson continues as Matron and is assisted by a staff of two Sisters, a Mothercraft Teacher, and probationer nurses as required.

## **STAFF.**

**Medical.** The re-organisation of the medical staffing of the department—as detailed in my last report—has completed a year's working.

The arrangement has worked smoothly and will make possible the co-ordination of the work of the Maternity and Child Welfare and School Medical Services.

**Health Visitors.** There were two additional health visitors appointed during the year to meet the increase of work due to expansion of the activities of the department. Miss R. M. Beacock and Miss H. Dolan commenced duties on 11th April.

I deeply regret to report that the Maternity and Child Welfare service lost one of its most loyal and conscientious health visitors by the tragic death, after a short illness, of Miss Gladys Payne. She had been in the department for almost six years and her death is deeply deplored. The vacancy thus caused was filled by the appointment of Miss C. N. Casson who commenced duties on 2nd May.

I also deeply regret to report that Miss Marjorie Harrington, a health visitor who had been on the staff for some 18 months, went on sick leave during the autumn and was granted six months' leave of absence for medical reasons. Unfortunately her illness terminated fatally in April, 1939.

E. B. BERENICE HUMPHREYS.

June, 1939.





# Report of the City Analyst

For the Year 1938.

By

F. C. BULLOCK, B.Sc., F.I.C.

Public Analyst and Official Agricultural Analyst.

With foreword by the Medical Officer of Health.

## COMMENT BY THE MEDICAL OFFICER OF HEALTH.

I have pleasure in submitting herewith the report of the Public Analyst on the work of the Department during 1938.

The report is the tenth report of the series and it is therefore interesting to note the very great expansion of work there has been in that period. A three-fold increase on the total number of investigations for the year 1929, and the four-fold increase in miscellaneous samples, as compared with 1937, indicates to some extent the expansion of the work.

The increase is mainly in investigations on the purity of water supplies and of milk.

I would draw special attention to the Analyst's comments and criticism of existing legislation. The lack of standards in many common foodstuffs is unfortunate and should be remedied.

An interesting investigation has been that into the presence of metallic contamination of various foodstuffs. It would appear that there is considerable adulteration of food by metals usually thought to be foreign to the human economy. To what extent that is harmful is at present a matter of uncertainty and requires further investigation.



# Report of the City Analyst

For the Year 1938.

By F. C. BULLOCK, B.Sc., F.I.C.

Public Analyst and Official Agricultural Analyst.

## INTRODUCTION.

I have the honour to present my Tenth Annual Report on the work carried out in the City Laboratory. The report deals with the samples received and analysed during the year 1938. Results are summarised in the form of tables wherever possible, these being lettered as in previous reports to facilitate comparison.

One new table (L) is included; this shows the development of the work during the last ten years.

A glance at this table shows that the total number of samples examined is considerably greater than for previous years. This is mainly due to an increased number of (a) water samples, and (b) pasteurised milk samples examined by the Phosphatase Test. The latter test has proved exceedingly useful in revealing weak points in several local pasteurisation plants (see page 198).

In other directions the numbers of samples examined occasionally show a decrease, partly because we are now working to the limit of our present accommodation.

Metallic contamination of foodstuffs received increased attention in 1938, with one or two interesting results (see page 203).

No staff changes occurred during 1938. Mr. J. L. Pinder, B.Sc., F.I.C., obtained the Fellowship of the Institute of Chemistry (Branch E) in September, and I take this opportunity of again recording his very satisfactory service.

Messrs. Smart and Wright have also continued to show great interest in their work, and have developed considerable expertness in many routine processes.

## Food and Drugs (Adulteration) Act, 1928.

**Legal.** The above Act has been in force for exactly ten years. It is the main Act under which samples of foods and drugs are taken for analysis, and while being an improvement on previous legislation it is not, in fact, a consolidating Act as it was described to be. The following Acts and Regulations dealing with the purity of food are also still in force :—

Milk and Dairies (Amendment) Act, 1922.

Public Health (Condensed Milk) Regulations, 1923 and 1927.

Public Health (Dried Milk) „ „

Public Health (Preservatives, etc. in Food) Regulations, 1925 to 1927.

Sale of Milk Regulations, 1901 and 1912.

Sale of Butter „ 1902.

Artificial Cream Act, 1929.

Milk and Dairies (Consolidation) Act, 1915.

Agricultural Produce (Grading and Marketing) Act, 1928.

In spite of this mass of legislation the Public Analyst still has very little help in solving many problems which arise almost daily. For instance, such questions as

“What is dripping ?”

“Is synthetic acetic acid, plus water, plus burnt sugar, the nature substance and quality of vinegar ?”

“Can much water, plus a little gelatine, be used instead of fat to give consistency to potted meat ?”

“How much meat must a sausage contain ?”

“Need ice-cream contain any cream ?”

are still matters of personal opinion.

Unofficial standards have to be applied to such common articles as shredded suet and jam, and the latter has to be of very poor quality indeed before one is justified in recommending one's Authority to prosecute.

While the present position, therefore, is unsatisfactory there are hopes of improvement in the future. A completely revised Food and Drugs Act will come into force on the 1st October, 1939, achieving a much greater degree of consolidation than the present Act, and further providing for the introduction of legislation regulating generally the composition of foodstuffs. This new Act will also deal with the

important questions of labelling pre-packed foodstuffs and advertisements relating thereto.

One last point. With regard to the question of metallic contamination of foodstuffs, limiting permissible amounts of arsenic and tin are now fairly well established. It is to be hoped that under the new Act guidance will be given in due course on the permissible amounts of the equally ubiquitous metals—lead, copper and probably zinc.

### General.

1,577 samples of foods and drugs were taken under the Act. Eighty-two were reported against, being 5.2 per cent. of the total. Some of the irregularities were slight (see Tables C and D.) The corresponding figure for 1937 was 5.4 per cent.

### Milk.

1,049 samples were received for chemical examination, of which 39 (3.7 per cent. of the total) were unsatisfactory (see Table C.)

22 samples were deficient of some of their fat, that is, contained less than 3 per cent.

The worst was formal sample No. 291, deficient of 52 per cent. of its required minimum amount of fat.

14 samples, including three submitted privately, contained added water, as confirmed by the Hortvet Freezing Point Test. The highest amount of added water was 31 per cent. (Formal sample No. 2019.)

Three samples were reported against for extraneous foreign matter.

Conditions in the milk trade in large cities have changed much during the last ten to twenty years. The main factors are (a) the tendency for small producers and distributors to drop out or to merge with larger concerns, and (b) the almost universal adoption of pasteurisation of bulked supplies, except for the specially designated grades.

One result of these changes has been to increase the difficulty of detecting sporadic watering or the use of forbidden preservatives.

If a farmer watered milk for extra profit he seldom added as little as two or three per cent., but sufficient to be worth while, and in the days of individual small supplies this amount was easily detected. "Appeal to the cow" samples could be taken if desired. To-day, a faulty supply is probably mixed with other milk before coming on to



the retail market, and conclusive evidence of the presence of extraneous water is often impossible to obtain ; even the freezing point determination may leave one guessing when the resultant amount of added water is less than three per cent.

Similarly, preservative added to one individual supply may be diluted with genuine milk below a concentration which the sensitivity of the tests is able to reveal.

Even the character of the dirt found in milk has changed. This, at one time was usually dung from the cow or farmyard chaff, varied occasionally, perhaps, in the days when more milk was sold loose from a pail, with ash from the roundsman's cigarette. To-day, there is little doubt that the majority of milk is produced under more cleanly conditions, but if it does become contaminated with dung the fibrous portion is filtered out and the soluble constituents rendered innocuous by heating treatment before the milk is delivered to the consumer. It is thus more common to find to-day that any foreign matter occurring in milk takes the form of metallic fragments, either from rusty apparatus used in processing the milk or from wire brushes used for cleaning the bottles. Occasional glass particles from chipped bottles are also a possibility. Often the public themselves are responsible for returning bottles to the dairy in a condition which no routine process will clean.

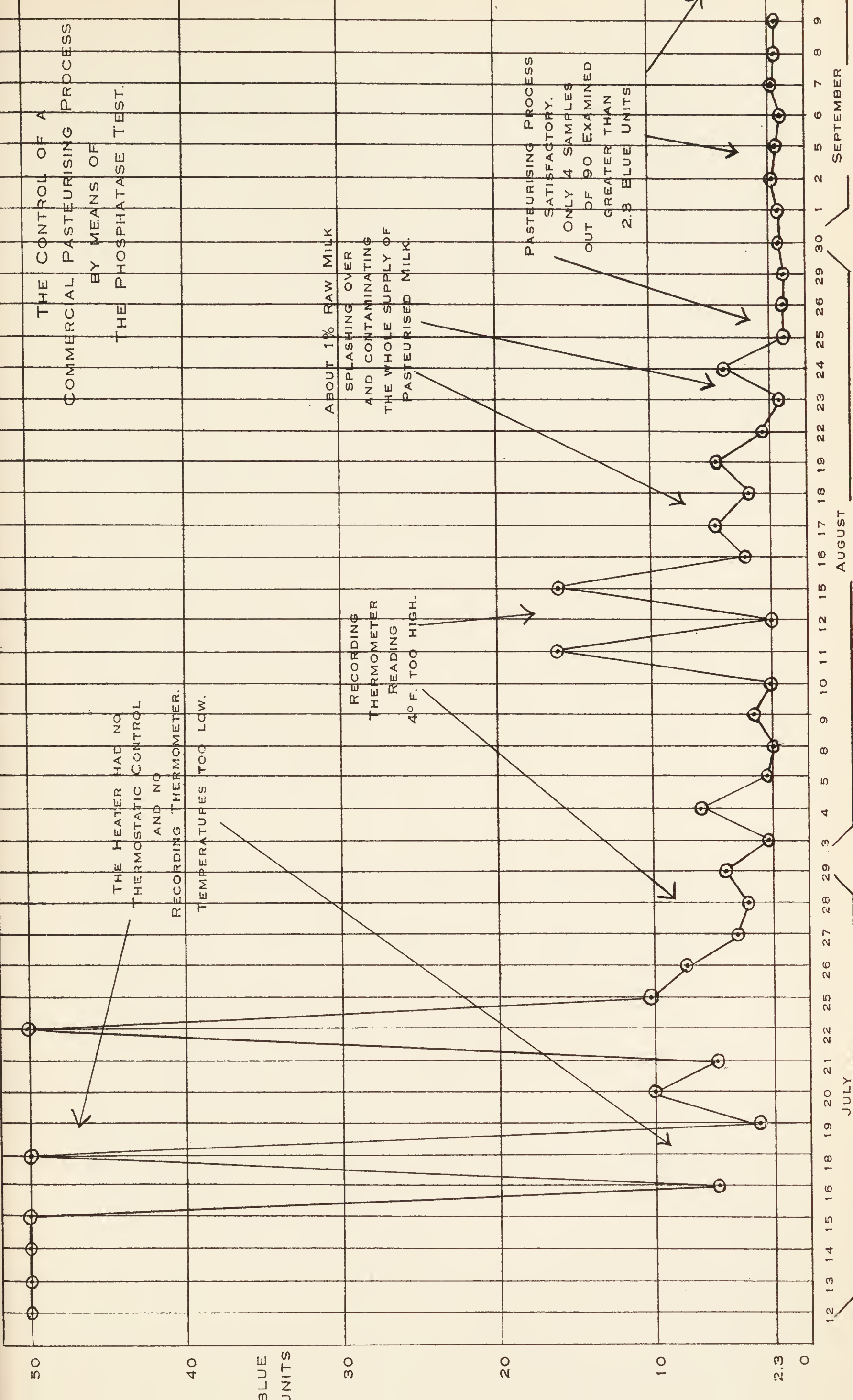
#### *Phosphatase Test.*

This test was described in the report for 1937 and mention was made of its great value for ascertaining whether any given sample of milk had been efficiently pasteurised or not. It was shown then that less than 40 per cent. of the 340 samples examined had actually been properly pasteurised, while over ten per cent. of the samples betrayed considerable errors in pasteurisation.

During the year under review the test has been put to most intensive use. In addition to its application to all samples of pasteurised milk received under the Milk (Special Designations) Order, 1936, a daily sample from every pasteurising plant in the City has been taken throughout the year. The summarised results are shown in Table P. The fact that 89 per cent. of the samples were completely satisfactory, against 37 per cent. for the previous year, speaks for itself of the value of the test in helping to effect an improvement in pasteurising technique.

The Ministry of Health Circular No. 1533 mentions this test, and on page 7 says, “. . . . It may also facilitate the detection of defects in the pasteurising apparatus or its working.”

GRAPH 4.







Our experience with a local plant is of interest in this connection. A series of daily samples taken early in July, 1938, gave readings of the order of 50 blue units. An Inspector visited the plant and found the heater was not fitted with thermostatic control, nor with a recording thermometer. His own thermometer indicated that the milk was not being heated to a high enough temperature. A thermometer was installed and some improvement took place, but even then readings were never below 2.3 blue units, and occasionally were as high as 16 blue units.

A second examination showed that the thermometer which had been fitted was inaccurate, reading 4°F. high. Allowance for this reduced the blue units further still, but readings of four to six were still usual. The manufacturers of the plant were then called in to investigate and in due course found that about one per cent. of raw milk was splashed over continuously into the pasteurised supply. This point was corrected towards the end of August, and thereafter readings of about 1.6 blue units were obtained regularly.

This experience is shown graphically in the chart and is typical of what has happened with other pasteurising plants.

Our only criticism of the Phosphatase test is that a delay of 24 hours is involved before the result is obtained. If this period could be reduced so that the dairy could be advised on the same day, if anything were amiss, the value of the test would be enhanced.

Unfortunately, enzymic action is not so amenable to being hurried as chemical action, by increased temperature, for instance, and it is on the former that the test depends.

## Ice Cream.

This popular commodity is now consumed in enormous quantities and probably forms an everyday article of diet for some sections of the population. Its main appeal for other classes as an extra between meals is naturally in the summer time, and the success of the "Stop me and buy one" slogan must have inflated an already considerable demand, even in an unseasonable summer like that of 1938. In short, it is definitely an article worthy of attention on the part of Public Health Authorities. From the Analyst's point of view, the two main considerations when reporting on a sample of ice cream are (a) fat content and (b) purity, both chemical and bacteriological. The nutritional value of ice cream depends largely on the fat content; qualitatively this should be butter fat, but as to the quantity that should be present there is some divergence of opinion.

### *Chemical.*

Standards for minimum fat content exist in some countries, ten per cent. being an average figure. No such standard exists in this country, although I believe it would be welcomed by Food and Drug Authorities and Trade Associations alike. In the meantime, data on various brands on the market are of interest. Of 34 samples examined in 1938, 17 had fat contents from 1.35 per cent. to 4.1 per cent., and 17 had from 10.2 per cent. to 14.5 per cent. Curiously enough, no intermediate values were obtained.

The samples thus fall into two quite distinct classes, this distinction being further emphasised by the fact that 13 samples found to contain starchy filler all belonged to the low fat category.

This type of article is not necessarily unwholesome and there is no doubt a genuine demand for a cheap grade of ice cream by children who buy it as a sweet without any thought of calories or vitamins.

Nevertheless, while the range of products covered by the term "ice cream" includes fat contents varying from 1.35 per cent. to 14.5 per cent. one appreciates the astuteness underlying the old tag "Caveat emptor."

The Ice Cream Association of Great Britain has suggested eight per cent. butter fat as a minimum standard. This would be easy of achievement by most of the well-known makers of ice cream, and if it were adopted the products having a corn flour basis and low fat content could be differentiated by requiring to be sold under some other term, such as "ices" or "hokey pokey."

### *Bacterial.*

All the ice creams were examined for general bacterial quality, viz. (a) plate count on milk Agar at 37°C. after 48 hours incubation, and (b) B.Coli test.

The rich fat class had counts from 100 to 750,000, averaging 100,000. Ignoring four samples with a count of over 100,000, the remaining 13 had an average count of 16,700. Four samples contained B.Coli in 1/1,000th of a ml. Three of these were a series from the same firm. It was found that this ice cream was made in another town and was sometimes permitted to thaw before being finally frozen ready for sale.

The low fat class had total counts from 50 to 4,000,000, the twelve samples with counts below 100,000 averaging 35,300. B.Coli was only once present in 1/1,000th. of a ml.



## Butter.

Two samples (Nos. 1807 and 282), and one sample of margarine (No. 1812) were reported against for slight excess of water over the 16 per cent. permitted.

## Shredded Suet.

Three samples were condemned owing to deficiency of fat, the minimum of 83 per cent. suggested by the Society of Public Analysts in 1931 being adopted as a standard.

One of the samples declared on the label, "Goes half as far again as raw suet. Use one-third less than you would of raw suet or lard." This is an obvious untruth since raw suet contains about 96 per cent. of fat, and lard 100 per cent. of fat.

Another sample, free from starch and consisting of 100 per cent. beef fat, contained a remark on the label, "Half a pound is almost equal to one pound of raw suet." Although this was a good specimen and contained 100 per cent. of fat, it certainly did not contain 200 per cent. of suet, and the manufacturer has since modified his label.

## Flour.

A sample of flour brought in privately (No. 279) was alleged to have "fizzed and spoilt four eggs." The ash of this sample was abnormally high (6.1 per cent.), and contained phosphoric acid, equivalent to 4.94 per cent. of  $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$ . Chloroform flotation yielded a residue of 14.4 per cent. The sample had a pH value of 7.7 instead of the usual 6.9; presumably, an excessive amount of sodium bicarbonate was present due to improper mixing. A follow-up formal sample was normal.

## Jam.

One sample of raspberry jam (No. 2276) was condemned for a deficiency of nine per cent. fruit on the declared Full Fruit Standard amount of 38 per cent.

## Vinegar.

Two samples (Nos. 18 and 53), purchased as vinegar, were reported as not genuine, following the recent decision *Sutton v. Tame*. The oxidation values and iodine values (as defined by Edwards and Nanji, *Analyst* LXIII, page 410) were determined on a number of samples, with the following results:—



Sample No.	Sample	Oxidation Value	Iodine Value	Nitrogen %	Phosphate	Report
1000	Malt Vinegar	755	1052	.053	+	Genuine
883	„	664	728	.072	+	„
17	Vinegar	842	404	.069	+	„
18	„	4.5	4.8	.009	-	Not Genuine
7	„	1302	904	.056	+	Genuine
8	„	400	492	.103	+	„
9	„	592	832	.074	+	„
10	„	381	836	.070	+	„
53	„	3.2	5.8		-	Not Genuine

The two samples reported against as consisting of artificial vinegar showed a marked difference in their analytical figures from the other samples.

### Meat Foods.

Four samples of sausage were condemned for containing undeclared sulphite preservative. The amounts were all round about 300 parts per million, and were below the maximum permitted amounts had preservative been declared as present.

Three samples of potted beef were reported as containing an excessive amount of water. Added gelatine had been used to give consistency. It was recommended to the makers that if they used more fat and no gelatine, the water content would look after itself.

### Drugs.

*Bismuth Tablets*: One sample (No. 1874) contained 7.4 per cent. of French chalk. The use of this lubricant in pharmaceutical preparations was discussed in the reports for 1933 and 1934.

*Spirit of Sal Volatile*: Four samples of this article were deficient both in ammonia and carbon dioxide. It was found that a final but unauthorised filtration through activated carbon had been carried out by an assistant to give a bright product.

*Borax*: The labelling of two brands of borax contravened the Public Health (Preservatives, etc. in Foods) Regulations, Section 5(i). Sample

No. 850 was described, among other things as, “. . . A useful cleanser, antiseptic and preservative.”

Sample No. 988 had a wrapper bearing the legend, “Borax disinfects. Borax destroys taint. Fresh meat and poultry are preserved by washing in borax water. Borax stiffens linen. Borax water brightens carpets. Borax improves the colour of green vegetables while boiling.”

The firms concerned were written to and they undertook immediately to use amended labels and to issue obliterating slips for gumming on to packets of borax already in retailers' stock.

*Lime Water* : Three samples (Nos. 450, 451 and 454) did not comply with the B.P. Limit Test for chlorides. The amounts of soluble chloride present in each case strongly suggested that tap water had been used in manufacture instead of distilled water, as required by the B.P.

Nos 450 and 451 were unsightly, turbid preparations and contained a good deal of insoluble calcium carbonate, in addition to the required amount of soluble lime.

### **Metallic Contamination.**

Many articles of diet under modern conditions are liable to exhibit some degree of metallic contamination. The wide use of agricultural sprays containing lead, copper and arsenic, the popularity of copper as a medium for extracting apparatus and evaporating pans, the employment of lead for piping in beer machines and its occurrence in soldered joints of otherwise innocuous plant, and the fatal handiness of the homely zinc galvanised bucket as a temporary food container, all account for traces of unwanted metals appearing in foodstuffs.

As the significance of minute traces of toxic metals in foodstuffs is not thoroughly understood there is no infallible principle to adopt in deciding the maximum amounts permissible in any one food, and every case has to be considered on its merits. The smallest amount that can be achieved in practice without causing unfair hardship to the manufacturer fixes one possible standard, and is the principle recommended by the Chief Medical Officer in his report on the “State of Public Health,” issued in 1934.

In the light of future knowledge it may be possible to relax this standard in the case of some metals ; on the other hand, it may prove necessary to exclude certain metals from foodstuffs altogether.

### Lead.

A case of alleged poisoning was reported to this department and suspicion was thrown on the beer which the patient consumed. The "first draw" of this supply (Sample No. 497) contained four parts per million of lead; it was found that the tin surfacing to the lead pipes which conveyed the beer from the barrel to the pump was worn away and the man concerned had been a regular first customer for years past.

Sixteen samples of beer in all were examined for lead, and six contained more than 0.2 parts per million. See Table D.

### Tin.

Thanks to the enterprise of the food-canning industry it is possible to obtain, to-day, a large variety of foodstuffs in choice condition, out of season, and if necessary at places remote from the country of production. For this very great convenience it is not surprising that some sacrifice has to be made—loss of vitamin content, perhaps, and obviously risk of the food being, to some extent, contaminated with tin.

Although in actual fact millions of tins must be sold in which the degree of contamination of the contents is negligible, the slight risk is patent to all, and people who dislike the idea of partaking of even minute traces of tin are free to dispense with the use of canned goods.

How many people, however, realise that nearly all brown sugar of the Demerara type is treated with a chemical compound containing tin, simply to enhance its appearance; and that whereas two grains of tin per pound of foodstuff is generally accepted as the maximum permissible degree of contamination in canned foods, most manufacturers of brown sugar tacitly assume the right deliberately to add to their products up to this amount of tin as normal practice?

A number of samples of tinned peeled shrimps were examined. No. S. 71 contained 4.4 grains of tin per pound; this sample was in a decomposing condition and was therefore unfit for food in any case.

No. 2240 contained 2.5 grains of tin per pound.

Four satisfactory samples (the maximum tin content 0.7 grains per pound) were all alkaline in reaction and all contained abundant well-formed crystals of struvite.



One sample of Barbadoes sugar (No. 2284) contained 0.3 grain per pound of tin and was infested with mites.

Three samples of Demerara sugar (Nos. 260, 261 and 2275) contained respectively 0.66, 1.1 and 1.25 grains of tin per pound.

One sample of dark brown sugar (No. 265) contained 3.1 grains of tin per pound.

Although this process of mordanting sugar with tin salts appears to have been in practice for many years, samples sometimes turn up free from tin, and it is not obvious that the same toleration for tin allowed in canned goods should apply in the case of sugar.

After correspondence with the Ministry of Health, the wholesalers and the West India Committee, it was decided for the time being to adopt a maximum standard of two grains per pound of tin without prejudice to revision at some future date.

#### **Zinc.**

Four samples of ice cream, all from one manufacturer, were found to contain definite traces of zinc, the highest being 0.66 grains per pound. It transpired that the mix before freezing was allowed to ripen for 24 hours while being kept in ordinary zinc galvanised buckets. The manufacturer was asked to substitute vessels made of some other material.

#### **Copper.**

As a contaminant of foodstuffs this metal seems to be almost ubiquitous. True, the amount present is often small, but it is sometimes considerable, and the case for the need of copper in the human system has not yet been completely established as it has for rats. (Bacharach. Science and Nutrition, 1938.)

The detection and estimation of copper has been much facilitated recently by the introduction of sodium diethyldithio-carbamate as a reagent; and as a confirmatory the old test of immersing a bright needle in the foodstuff, acidified if necessary, and allowing to stand overnight is surprisingly sensitive. The Table below indicates the amounts of copper which we have found in various foodstuffs. It includes some samples analysed in the present year (1939). As to permissible amounts, as stated above, each case has to be judged on its merits.

Article.	No. of Samples.	Copper : parts per million.		
		Maximum.	Minimum.	Average.
Raisins, Sultanas, Currants	9	11	5	7.4
Glacé Cherries .. ..	3	20	11	16
Lemon Peel .. ..	3	11	8	9.6
Elderberry Wine .. ..	1			4.5
Black Currant Wine .. ..	1			3.7
Black Currant Jam .. ..	1			10
Clear Mints .. ..	1			4
Yeast Extract No. 1. .. ..	2	37	20	28.5
Yeast Extract No. 2. .. ..	2	60	60	60
Beef Extract .. ..	1			12
Vinegar .. ..	9	11	1.0	3.9
Beer .. ..	2	2	2	2
Tomato Ketchup .. ..	4	19	6	12
Sauce .. ..	2	8	4	6
Coffee and Chicory Essence	19	37	8	14.6
Dandelion Coffee Essence	6	50	4	16
Dandelion Coffee .. ..	1			15

A malt vinegar manufacturer was amazed to hear that his product contained as much as 11 parts per million of copper, and stated that the amount present normally was from one to four parts per million, derived from the raw materials and from phosphor bronze parts of pumps and coolers. In this particular case a defective pasteurising plant was subsequently found to have introduced the excess of copper, and a process of stream-line filtration was substituted for pasteurisation.

On the other hand, a yeast extract manufacturer blamed the brewer who supplied the yeast for the high copper content in his product, and rather took the attitude that as yeast was a by-product of the brewer, he could not be expected to take any trouble to ensure the absence of copper or anything else. As far as they were concerned, they promised to replace copper plant with stainless steel and monel metal and thereby undertook to reduce the degree of copper contamination.

Tomato purée is notoriously prone to copper contamination, some of the copper being associated with the original fruit from the use of sprays containing copper salts, and this is augmented by further metal derived from copper evaporating plant. It is not surprising, therefore, that tomato ketchup and sauces which contain a proportion of purée also contain copper.

The least contaminated sample of ketchup was one of American origin and contained six parts per million of copper. On the other hand, one derived from purée, of Continental origin, contained 19 parts per million. The English manufacturer of this article stated that all his plant was of nickel or stainless steel, and the copper was derived entirely from the original purée which he could not control.

The difficulty of controlling the copper in products containing tomato purée seems to be a real one, but new regulations relating to imported tomato products will come into force on the 1st January, 1940, limiting the amount of copper to 50 parts per million on the total dry solids.

The coffee and chicory essences shown in the table have been examined in the current year, but with regard to their copper contents, our present information seems to show that the amount of copper varies inversely as the amount of coffee, and is therefore presumably all derived from metallic apparatus used in manufacture.

The Dandelion Essence containing 50 parts per million of copper was sold as a "Health Food," with a label specially recommending it "for those suffering from weak stomachs, dyspepsia and indigestion." As a result of our representations to the manufacturer, he undertook to use earthenware vessels for extracting the root in the future.

**Bacterial Samples.**

The number of samples required to be examined by bacteriological methods again shows an increase over previous years :—

Year ..	1932	1933	1934	1935	1936	1937	1938
No. of Samples	561	533	580	517	756	883	1,045

The samples are classified in Table O.



## **Milk (see Table E).**

“Tuberculin Tested” and “T.T. (Certified)” Milk are now the highest grades of raw milk, while “Accredited Milk” has taken the place of what was formerly known as “Grade A” Milk. These grades are now examined for their keeping quality by the Methylene Blue Reductase Test, and are not limited as to the number of microbes they may contain, since it is now recognised that a high number of harmless microbes is probably not so objectionable as a less number of more dangerous ones.

The milk is incubated under very precise conditions with a solution of methylene blue. If the blue remains undecolourised for four and a half hours in summer, or five and a half hours in winter, it is considered as evidence that the milk was produced and distributed under cleanly conditions sufficient to warrant its special designation. The test for the presence of B.Coli (dung bacillus) is optional. We actually apply it to every sample. Normally, B.Coli should be absent from 1/100 ml., two tubes out of three.

From Table E it would appear that the B.Coli test is more stringent than the Methylene Blue Reductase Test.

## **Shellfish (see Table H).**

For general remarks see previous reports.

All the seven samples of oysters examined were passed as satisfactory.

Of the 32 samples of mussels, 19 were satisfactory, four were borderline cases (that is 50 per cent. clean), and nine were reported unsatisfactory.

The quality of the mussels from some areas seems to be very precarious. No doubt, in the fullness of time, the practice of tank purification will be adopted generally for shellfish.

## **Swimming Bath Waters (Tables F and G).**

The general remarks in earlier reports and system of sampling still hold good. The tables show the record for the year to be a satisfactory one. Only one sample out of 61 from public bathing pools contained B.Coli, and that was during a temporary breakdown of the chlorinating plant.

The present position with regard to swimming waters may be summarised by saying that the engineers in charge of the pools have adequate means of which they make the fullest use for maintaining the

water in a safe condition. It is up to the public as individuals to co-operate by having a preliminary shower bath before entering the swimming pool.

By contrast, a series of samples from the river open-air bathing stations at Bede House and Abbey Meadows gave a very different picture. High bacterial counts were reported in the majority of the samples, and organisms indicative of sewage pollution were present in all, sometimes to the extent of over 100 per ml.

Through February, March, April and May, these waters were consistently reported to be "far below modern bacteriological standards recognised as desirable for safe bathing," and as a result both stations were in due course closed to the public.

In view of the unsatisfactory state of the river revealed by these samples, examinations were made of the various tributaries of the River Soar and their feeders in the Leicester area. Various degrees of pollution were found, and in some cases it was possible to indicate a serious source of pollution.

### **Watercress.**

A sample of water cress (No. H.2) was submitted privately with an accompanying complaint of bad smell and presence of duckweed. The cress appeared to be in a stale condition and had a large amount of duckweed adhering to it.

In the course of a rough bacteriological examination the sample was found to be highly contaminated with coli-aerogenes organisms. For convenience, the counts were reported as so many per sprig, one sprig representing three grammes of cress. A check sample from the same source (No. 2040) gave a very similar result, the coli-aerogenes amounting to about 100 per sprig.

Further supplies were examined, the results of which are summarised in Table W. It was found that traces of duckweed were more often present than not, whilst some supplies contained many fresh water animals, including snails, gammarus pulex and small fish. Most of this extraneous matter was readily removed by washing.

The regulations for watercress sold under National Mark designation require the cress to be "clean, well flavoured, fresh, in good condition, free from woody or long stalks, seed or flower stems, pointed leaves or long roots, free from damage caused by frost, insects, disease, mechanical or other means." The beds are to be "so designed as reasonably to prevent contamination, infiltration or drainage of surface



water," whilst the water supply entering the beds must be of the same degree of purity as required for drinking water supply.

Apart from these regulations there appear to be no standards for watercress. According to our experience it would appear that even the worst samples are rendered sufficiently clean after thorough washing, and a standard of ten B.Coli per three gramme sprig on the unwashed samples appeared to be reasonable enough to include most commercial samples.

### **Drinking Waters.**

Water from seven local wells was examined. Past and present pollution was evident in every case ; the samples were condemned and the wells closed.

Another well gave one doubtful sample and one satisfactory sample.

Two well waters from Desford Boys' School were both of satisfactory bacterial quality.

Five samples from "Home Place," Holt, gave four satisfactory results and one unsatisfactory result. Although there was an element of doubt as to the manner in which the unsatisfactory sample was taken, chlorination was carried out pending a satisfactory sample being obtained.

Of 98 City supply samples submitted by District Sanitary Inspectors, 93 were reported as satisfactory. In the case of the five samples giving unsatisfactory results, appropriate action was taken immediately in every case.

Routine monthly samples from the three local reservoirs were submitted on behalf of the Water Committee. Results of the coli test only are summarised in Table X. It will be seen that at Swithland and Cropston the final water was satisfactory on every occasion. At Thornton, the water went foul during July and August, when a heavy growth of microcystis underwent decomposition. The supply was shut off until a normal condition returned.

### **Fertilisers and Feeding Stuffs Act, 1926.**

Table I shows in summary the samples analysed. It will be seen that out of a total of 16, eight were incorrect in composition, and in the case of three samples the statutory statement was not in correct form. For action taken see page 249.



### **Sussex Ground Oats.**

The usual troubles with this feeding stuff are (a) the presence of excess fibre, due to grinding very thin oats, or to the addition of oat offal, and (b) the presence of foreign meal of a cheaper grade.

Fibre in excess of 12 per cent. raises the suspicion of added oat husk ; some analysts consider nine per cent. should be the maximum fibre content permissible.

Of the four samples examined, the percentages of fibre were 15.2, 14.2, 10.6 and 8.6 respectively.

The sample containing 15.2 per cent. of fibre (No. F.89) also contained five per cent. of tapioca starch. After a check analysis the Ministry of Agriculture and Fisheries authorised a prosecution.

### **Meat and Bone Meal.**

Sample F.96 was deficient of 14.5 per cent. of oil and of 21 per cent. of phosphoric acid, but contained 19 per cent. excess of albuminoids (protein).

### **Sulphate of Ammonia.**

Sample No. F.91 proved on analysis to consist of nitrate of soda.

Other errors in the case of this fertiliser are inaccuracies in the statement of the amount of free sulphuric acid present, but these inaccuracies are not always to the prejudice of the purchaser.

### **Basic Slag.**

Sample No.F.88 was deficient of 16 per cent. of the declared amount of phosphoric acid, and the statutory statement was incorrect, the phosphoric acid being calculated as tricalcium phosphate.

A similar mistake was made in the case of sample No.F.93, a super-phosphate of lime.

### **Hoof and Horn Meal.**

Sample No. F.92 was deficient of seven per cent. of the declared amount of nitrogen.

### **Rag Flock Act, 1911.**

Six samples were examined and all complied with the test for cleanliness required to be conformed to by the Regulations, namely,

that the soluble chloride determined under certain conditions should not exceed 30 parts per 100,000.

### **Miscellaneous Samples (see Table K.)**

Included under this heading are 32 samples of breast milk, examined for the Maternity and Child Welfare Department, and soaps, etc., examined in connection with hospital contracts, and other miscellaneous samples.

Nothing calls for particular comment except perhaps the earth-worms. There were found on two separate occasions in the same brand of T.T. Certified Milk, and had probably been added maliciously by one of the dairy hands.

### **Atmospheric Pollution.**

The special survey of atmospheric pollution in Leicester, by the Department of Scientific and Industrial Research, has continued through the year, and the contribution of this laboratory to the work has been the same as for 1937, viz., regular readings have been taken on the following instruments :—

- (a) Volumetric Sulphur Dioxide Recorder.
- (b) Lead Peroxide Candle.
- (c) Automatic Dust Filter.

The results are summarised in Tables M, N and Q. The general conclusions to be drawn are similar to what has been noted in previous years.

F. C. BULLOCK,  
Public Analyst.

**TABLE A.**

**Summary of Samples Analysed during 1938.**

**Food and Drugs (Adulteration) Act, 1928 :**

Samples submitted by Sanitary Inspectors	1,577
„ „ „ members of Public	9
Shellfish .. .. .	39
Watercress .. .. .	13
Ice Cream, etc. .. .. .	35
	<hr/>
Total .. .. .	1,673

**Fertilisers and Feeding Stuffs Act, 1926 :**

Informal samples submitted by Sanitary Inspectors.. .. .	14
Formal samples submitted by Sanitary Inspectors.. .. .	2
	<hr/>
Total .. .. .	16

<b>Rag Flock Act, 1911</b> .. .. .	6
------------------------------------	---

<b>Milk (Special Designations) Order, 1936</b>	634
--	-----

Reference Samples .. .. .	21
---------------------------	----

Atmospheric Pollution Samples .. .. .	749
---------------------------------------	-----

**Miscellaneous Samples for various Committees :**

Health Committee .. .. .	1,983
Water Committee .. .. .	292
Education Committee .. .. .	15
City Surveyor .. .. .	9
Transport Committee .. .. .	2
Markets Committee .. .. .	2
	<hr/>
Total .. .. .	2,303
	<hr/>
Grand Total .. .. .	5,402
	<hr/>



TABLE B.

## FOODS AND DRUGS ANALYSED DURING 1938

(Sampled by Inspectors under Food and Drugs Act.)

Sample.	No.	Sample.	No.
Condensed Milk .. ..	3	Sausage .. ..	16
Dried Milk .. ..	1	Meat Paste, etc. .. ..	21
Ice Cream Powder .. ..	2	Marmite .. ..	2
Ice Cream .. ..	35	Tinned Fruit .. ..	1
Cream .. ..	7	„ Fish and Meat .. ..	7
„ Substitute .. ..	1	Food Colouring .. ..	1
Cheese .. ..	18	Shellfish .. ..	39
Butter .. ..	24	Watercress .. ..	13
Margarine .. ..	12	Ice Cream (Bacterial) .. ..	35
Lard .. ..	6	Glauber Salts .. ..	6
Lard Substitutes .. ..	4	Epsom Salts .. ..	4
Dripping .. ..	4	Sodium Bicarbonate .. ..	6
Suet .. ..	11	Borax .. ..	7
Sago and Tapioca .. ..	4	Hydrogen Peroxide .. ..	4
Rice .. ..	6	Glycerine .. ..	9
Pearl Barley .. ..	3	Cinnamon .. ..	6
Flour .. ..	9	Linseed .. ..	6
Sugar .. ..	17	Cod Liver Oil and Malt .. ..	3
Sweets .. ..	15	Oil, Almond .. ..	7
Jam .. ..	4	„ Castor .. ..	4
Honey .. ..	3	„ Cod Liver .. ..	6
Beer .. ..	16	„ Olive .. ..	12
Spirits .. ..	16	Tablets, Bismuth .. ..	6
Wine .. ..	6	„ Aspirin .. ..	13
Vinegar .. ..	10	„ Soda Mints .. ..	6
Mushroom Ketchup .. ..	1	Liquorice Powder .. ..	2
Tomato Ketchup .. ..	4	Gregory's Powder .. ..	2
Sauce .. ..	2	Ointment, Mercury .. ..	6
Rum Sauce .. ..	1	„ Zinc .. ..	12
Force Meat.. ..	1	„ Boric .. ..	6
Coffee .. ..	6	Tincture of Iodine.. ..	4
„ Essence .. ..	3	Prescriptions .. ..	6
Cocoa .. ..	2	Lime Water .. ..	6
Ground Almonds .. ..	4	Sal Volatile .. ..	6
Pepper .. ..	2		
Mustard .. ..	5		
Dried Fruit.. ..	21		
			579

**TABLE C.**  
**Milk Samples reported “Not Genuine.”**  
(For action taken see page 245.)

No.	Sample.	Nature of Deficiency.
1924	Informal	10% deficient Fat.
1933	„	19% added water
2019	Formal	31% „ „
2020	„	25% „ „
2021	„	15% „ „
303	Informal	8% deficient Fat
1946	„	6% „ „
1988	„	18% „ „
311	„	4% added water
1691	Formal	18% deficient Fat
2172	„	10% „ „
2174	„	16% „ „
2251	„	10% „ „
389	Informal	5% „ „
291	Formal	52% „ „
543	„	3.3% added water
2343	Informal	8% deficient Fat
2353	„	10% „ „
2356	„	10% „ „
444	Formal	6% „ „
1120	Informal	6% „ „
139	„	8% „ „
142	Formal	11% „ „
486	„	6% „ „
1167	Informal	26% „ „
190	Formal	5% added water
197	„	5% „ „
914	„	3% „ „
915	„	6% „ „
936	Informal	7.5% „ „
836	Formal	8% deficient Fat.
M602	Private	5% added water
884	Formal	9% deficient Fat
892	Informal	Dirty
891	„	„
31	„	„
M605	Private	7.5% added water
1701	Formal	5% deficient Fat
M607	Private	2% added water.

TABLE D.

## Defective Samples other than Milk Shellfish and Watercress.

(For action taken see page 247).

No.	Description.	Sample.	Nature of Defection.
<b>Foods.</b>			
294	Ice Cream	Informal	$\frac{2}{3}$ grain per lb. Zinc
297	„	„	$\frac{1}{4}$ „ „
298	„	„	$\frac{1}{4}$ „ „
558	„	„	0.14 „ „
1807	Butter	„	16.16% water
282	„	„	16.57% „
1812	Margarine	„	16.26% „
815	Shredded Suet	„	2.3% deficient Fat
972	„	Formal	3.1% „ „
991	„	Informal	4.4% „ „
279	Flour	„	Alkaline : 6.1% Ash
2275	Demerara Sugar	„	1.25 grain per lb. Tin
2275	Barbadoes Sugar	„	0.3 grain per lb. Tin and dead mites
260	Demerara „	„	0.66 grain per lb. Tin
261	„ „	„	1.1 „ „
265	Dark Brown „	„	3.1 „ „
2276	Raspberry Jam	„	9% deficient of Fruit
497	Beer	„	4 p.p.m. Lead
182	„	„	0.6 „
186	„	„	0.4 „
199	„	„	0.6 „
200	„	„	0.7 „
844	„	„	1.0 „
986	Whiskey	„	3.8% added water
1000	Vinegar	„	11 p.p.m. Copper
898	„	„	10 „ „
18	„	„	Artificial Vinegar
53	„	Formal	„ „
2175	Sausage	Informal	280 p.p.m. Sulphur Dioxide
2177	„	„	260 „ „ „
2178	„	„	340 „ „ „
2183	„	Formal	306 „ „ „
159	Potted Beef	Informal	31% water, 69% meat
166	„	Formal	23% „ 77% „
874	„	Informal	31.5% „ 68.5% „
S.71	Tinned Shrimps	Private	4.4 grain per lb. Tin. Fish decomposing
2240	„	Informal	2.5 grain per lb. Tin. Fish decomposing



TABLE D.—*continued.*

No.	Description.	Sample.	Nature of Defection.
	<b>Drugs.</b>		
850	Borax	Informal	Infringement of Public Health (Preservative) Regulation
S.74	„	Private	„ „
988	„	Private	„ „
1874	Bismuth Tablets	„	7.4% Talc
579	Spirit of Sal Volatile	„	26% deficient Ammonia, 14.6% deficient Carbon Dioxide
585	„ „	„	19% deficient Ammonia, 10.6% deficient Carbon Dioxide
588	„ „	Formal	23% deficient Ammonia, 15% deficient Carbon Dioxide
589	„ „	„	16% deficient Ammonia, 11% deficient Carbon Dioxide
450	Lime Water	Informal	The samples did not comply with B.P. limit Test for chlorides and had heavy in- soluble deposit at bottom of bottle.
451	„	„	
454	„	„	
			Excess Chloride

TABLE E.  
Result of Bacterial Examination of Milk, 1938

Grade.	Total No. examined.	Passed as satis- factory.	No. failed Methylene Blue Test.	Total count too high.	B. Coli too numerous.	% satisfactory	
						1938	1937
Tuberculin Tested and Tuberculin Tested (Certified) .. ..	79	69	4	—	9	87.5	91
Accredited .. ..	147	106	25	—	35	72	82
Tuberculin Tested (Pasteurised) .. ..	38	37	—	1	—	97.5	77
Pasteurised .. ..	177	173	—	4	(4)	98	93
Heat Treated .. ..	46	45	—	1	(1)	98	—
School Milks (Pasteurised) .. ..	140	131	—	9	(5)	93.5	95
Sterilised .. ..	1	1	—	—	—	100	100
Miscellaneous (Bottled and Raw) .. ..	3	2	—	1	—	66.5	100
Accredited Applications .. ..	3	3	—	—	—	100	100
Total .. ..	634	567	29	16	(54)	89.5	89.3

**TABLE F.**  
**Swimming Bath Waters Examined during 1938.**

Bath	Period	No. examined	No. of satisfactory bacter. quality	Unsatisfactory			% passed as bacterially satisfactory
				Count too high	B. Coli too numerous	excessive chlorine	
Aylestone ..	April-Sept.	6	5	1	—	1	83
Spence St. ..	do.	8	7	1	—	—	87
Cossington St.	do.	6	6	—	—	—	100
Bath Lane ..	do.	6	6	—	—	—	100
Vestry St. ..	Jan.-Dec.	16	16	—	—	4	100
Total (Corporation Baths)		42	40	2	—	5	95
Kenwood ..	May-Aug.	9	8	1	1	—	89
Humberstone Lido ..	April-Aug.	8	8	—	—	—	100
Wyggeston Boys' School	June-July	4	2	—	2	—	50
Haddenham Road School	July	1	—	1	—	—	Nil.
Total (All Baths) ..		64	56	4	3	10	87.5

**TABLE G.**  
**Summary of Results from Corporation Baths during last 7 years.**

Year.	1932	1933	1934	1935	1936	1937	1938
Number of samples ..	90	77	51	41	45	46	42
% satisfactory .. ..	43	54.5	74	90	78	87	95

**TABLE H.**  
**Shellfish Examined during 1938.**

Sample	Total No. examined	Total No. satisfactory	% Clean										
			Condemned.						Passed				
			0	10	20	30	40	50	60	70	80	90	100
Oysters ..	7	7	—	—	—	—	—	—	2	1	3	1	—
Mussels ..	32	23	2	—	2	4	1	4	9	2	2	4	2
Miscellaneous	1	1	—	—	—	—	—	—	—	—	—	—	1
Total ..	40	31	2	—	2	4	1	4	11	3	5	5	3



TABLE I.

**Fertilisers and Feeding Stuffs Analysed under the  
Fertilisers and Feeding Stuffs Act during 1938.**

Sample	Number	Number Unsatisfactory.			
		Composi- tion Incorrect	Statutory Declara- tion Defective	Total	
<b>Fertilisers.</b>					
Basic Slag .. ..	2	1	1	1	
Ammonium Sulphate .. ..	5	3	1	3	
Hoof and Horn Meal .. ..	1	1	—	1	
Superphosphate .. ..	1	—	1	1	
Nitrate of Soda .. ..	1	—	—	—	
<b>Feeding Stuffs</b>					
Sussex Ground Oats .. ..	4	2	—	2	
Maize Meal .. ..	1	—	—	—	
Meat and Bone Meal .. ..	1	1	—	1	
Total .. ..	16	8	3	9	

TABLE J.

**Samples Submitted by Members of the Public.**

Milk .. .. .	4
Watercress .. .. .	1
Apple .. .. .	1
Flour .. .. .	1
Shrimps (Tinned) .. .. .	1
Borax .. .. .	1
—	
Total .. .. .	9
—	

**Samples examined for various Corporation Departments.**

221

TABLE L.

Summary of Samples analysed during 10-year period, 1929-1938.

Category.	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Sale of Foods and Drugs Act .. ..	1172	1519	1344	1481	1149	1107	1014	1417	1711	1583
Fertiliser and Feeding Stuffs Act .. ..	—	7	13	13	13	15	13	16	13	16
Rag Flock Act .. ..	6	2	6	5	3	5	6	2	6	6
Milk (Special Designation Orders) ..	256	264	247	352	380	380	284	575	625	634
Atmospheric Pollution	36	36	35	35	38	38	879	700	700	749
Miscellaneous samples for various Committees, etc. ..	229	293	378	500	460	580	619	544	552	2363
Shell-fish .. ..	—	—	—	—	—	—	16	38	81	38
Watercress .. ..	—	—	—	—	—	—	—	—	—	13
Totals ..	1699	2121	2023	2386	2043	2145	2831	3292	3688	5402

TABLE M.

## ATMOSPHERIC POLLUTION.

Volumetric Method of Estimating Sulphur Dioxide Content of Air.  
Average daily readings per month at Grey Friars, 1938.

Results expressed as parts per million of SO<sub>2</sub> by volume.

Month.	Number of determinations.	SO <sub>2</sub> in p.p.m. by volume.		
		Average monthly figure.	Highest.	Lowest.
January ..	31	0.130	0.307	0.035
February ..	28	0.127	0.210	0.049
March .. ..	30	0.151	0.321	0.078
April .. ..	30	0.103	0.214	0.027
May .. ..	32	0.074	0.137	0.041
June .. ..	30	0.048	0.094	0.008
July .. ..	31	0.047	0.085	0.021
August .. ..	30	0.062	0.169	0.025
September ..	30	0.069	0.113	0.044
October .. ..	31	0.089	0.196	0.032
November ..	30	0.113	0.177	0.045
December ..	31	0.122	0.280	0.075



**TABLE N.**  
**ATMOSPHERIC POLLUTION:**

**Lead Peroxide Method for SO<sub>2</sub>. Average Monthly Figures for 1938.**  
**Results expressed in mgms. of SO<sub>3</sub> per 100 sq. cm. per day.**

Station—Grey Friars.

January	..	..	3.90	July	..	..	1.27
February	..	..	3.52	August	..	..	1.27
March	..	..	3.01	September	..	..	2.24
April	..	..	2.06	October	..	..	2.98
May ..	..	..	1.63	November	..	..	3.57
June ..	..	..	0.99	December	..	..	4.26

**TABLE O.**

**Summary of Samples examined by Bacteriological Methods in 1938.**

Milk (Classified in Table E)	..	..	..	..	..	..	493
Pasteurised Milks as supplied to Schools	..	..	..	..	..	..	141
Dried Milk and Ice Cream	..	..	..	..	..	..	35
Reservoir Waters (for Water Committee)	..	..	..	..	..	..	108
Drinking and Miscellaneous Waters (for Health Committee, etc.)	..	..	..	..	..	..	151
Swimming Bath Waters (Tables F. and G.)	..	..	..	..	..	..	64
Shellfish (for Health Committee, Table H.)	..	..	..	..	..	..	40
Watercress (for Health Committee, Table W.)	..	..	..	..	..	..	13
							1045

**TABLE Q.**  
**ATMOSPHERIC POLLUTION.**

**Automatic Filter Method for Estimating Dust Content of Air.**  
**Average hourly readings per month at Grey Friars, 1938.**

Results expressed in mgms. of dust per cubic metre of air.

Jan.	Feb.	March	April	May	June
0.22	0.19	0.25	0.21	0.13	0.07
July	August	Sept.	Oct.	Nov.	Dec.
0.06	0.11	0.18	0.21	0.21	0.29

TABLE P. Samples of Pasteurised Milk examined by the Phosphatase Test,

Dairy.	No. Examined.	No. giving less than 2.3 Blue units. Efficiently pasteurised.	% of Total.	No. giving 2.3—6.3 Blue Units. An Error of Pasteurisa- tion or addition of Raw Milk.	% of Total.	No giving more than 6.3 Blue Units. Serious Error in Pasteurisa- tion or addition of Raw Milk.	% of Total.
A.	123	89	72.4	22	17.9	12	9.7
B.	62	48	77.4	8	12.9	6	9.7
B. (Bacterial)	21	17	81.0	2	9.5	2	9.5
C.	375	339	90.4	30	8.0	6	1.6
C. (Bacterial)	86	82	95.3	3	3.5	1	1.2
D.	208	199	95.7	7	3.4	2	.9
D. (Bacterial)	111	104	93.7	4	3.6	3	2.7
E.	206	200	97.1	5	2.4	1	.5
E. (Bacterial)	13	12	92.4	0	0.0	1	7.6
F.	203	182	89.7	11	5.4	10	4.9
F. (Bacterial)	71	56	78.9	10	14.1	5	7.0
G.	207	180	87.0	23	11.1	4	1.9
G. (Bacterial)	10	10	100.0	0	0.0	0	0.0
H.	32	31	96.9	0	0.0	1	3.1
I. (Heat-treated)	45	31	68.9	10	22.2	4	8.9
Miscellaneous	6	—	—	—	—	—	—
Dairy C. also produced T.T. (Pasteurised) Milks. Results as follow :—							
C.	38	36	94.8	2	5.2	0	0.0
Grand Total	1817	1616	89.0	137	7.55	58	3.2
1937 Figures	343	127	37.1	179	52.2	37	10.7

TABLE W.

Results of bacteriological examination of Watercress.

Brand	No.	Appearance	Count per sprig (Agar, 48 hrs. @ 22° C)	Coli-Count per sprig (48 hrs. @ 37° C)	Ratio- counts washed
					unwashed
A	H2	In basin with water, foul smell, duck- weed	30,000,000	100	
A	2040		30,000,000	100	} 1:33
	„	(Washed)	900,000	1	
B	1297	Clean	50,000,000	3	} 1:23
	„	(Washed)	2,200,000	1	
C	1298	Very Clean	50,000,000	2	} 1:50
	„	(Washed)	1,000,000	0	
D	1299	Not very clean, duckweed	37,000,000	3	} 1:50
	„	(Washed)	750,000	0	
E	1300	Very Clean	1,080,000	3	} 1:26
	„	(Washed)	42,000	0	
F	2056	Some duckweed	6,000,000	0	
G	2057	Trace duckweed	4,500,000	3	
C	2058	Live Gammarus	2,400,000	0	
D	2059	Live Gammarus, 1 small dead fish, snail shells	1,500,000	2	
H	2060	No duckweed	2,000,000	4	
I	2061	Dead Gammarus, no duckweed	3,000,000	6	
A	H63		4,500,000	1	} 1:8
	„	(Washed)	560,000	0	
D	2068	Duckweed	30,000,000	54	
D	2069	„	4,000,000	4	



TABLE X.

## Coli Content of Reservoir Waters.

Reservoir.	No. of Samples	Number of B Coli per 100 ml.					No. Con-dem'd
		Coli absent	0-5	6-10	11-25	More than 25	
<b>Thornton :</b>							
Raw Water ..	2	0	1	0	0	1	1
Filtered Water ..	23	6	9	1	1	6	8
Filtered and Chlorinated ..	24	20	3	0	0	1	4
<b>Swithland :</b>							
Raw Water ..	2	1	1	0	0	0	0
Filtered Water ..	12	9	3	0	0	0	0
Filtered and Chlorinated ..	12	12	0	0	0	0	0
<b>Cropston :</b>							
Raw Water ..	2	1	0	0	1	0	1
Filtered Water ..	12	6	5	0	1	0	1
Filtered and Chlorinated ..	12	12	0	0	0	0	0

# Report on the Sanitary Inspection Department

for the year 1938.

By

F. G. McHUGH, M.R.San.I.,  
Chief Sanitary Inspector.

With foreword by the Medical Officer of Health.

## COMMENT BY THE MEDICAL OFFICER OF HEALTH

As in previous years, the report of the Chief Sanitary Inspector is mainly in statistical form. This should not render it any less interesting.

It is, however, difficult for the layman to appreciate the great volume of work done by this branch of the Health Department. The fact that death-rates, etc., show a satisfactory downward trend is to a substantial degree due to the care that is lavished on our City as regards the environmental aspect of our lives. The work of the Sanitary Inspection Department deals with this aspect.



# Report of Chief Sanitary Inspector for the year 1938.

The sanitary inspection staff consists of a Chief Inspector, a Deputy Chief Inspector and 27 Inspectors.

In June Mr. George Hughes Mawhinney, of Lincoln, was appointed a District Sanitary Inspector in place of Mr. Charles Jones who left to take up a post at Croydon.

The clerical staff consists of a Chief Clerk (male), two male clerks, three shorthand typists (female), a telephonist (female) and a uniformed messenger ; the services of the two latter are shared.

The ordinary routine work of the Sanitary Inspectors has been much interfered with by the air-raid precaution work they have been called on to perform. This work has included surveying and measuring cellar accommodation, surveying for the fixing of air-raid shelters for houses of the working classes, equipping of first-aid posts, and obtaining information for an Auxiliary Ambulance Service.

All of the Sanitary Inspectors attended a course of training in First-aid work and the majority attended a course in anti-gas measures.

## SYNOPSIS OF SANITARY INSPECTION WORK.

An "inspection" is the first visit paid to premises.

A "re-inspection" is a visit made after notice has been given for the remedying of a defect.

	Inspections.	Re-inspections.	Total.
Re Accumulations .. ..	192	—	192
Agricultural Produce (Grading and Marking) Act .. ..	17	—	17
Re Animals, Poultry, Swine, etc.	129	—	129
Ashpits and Ashbins .. ..	54	—	54
Bakehouses—Factory .. ..	106	7	113
Non-Factory .. ..	54	—	54
Canal Boats .. ..	48	—	48
Cesspools .. ..	60	—	60
Closets—Water .. ..	4394	193	4587
Privies .. ..	31	—	31
Pails .. ..	3	—	3
Cold Stores .. ..	114	—	114
Common Lodging Houses—Day .. ..	167	—	167
Night .. ..	4	—	4
Complaints Received .. ..	3035	3987	7022
Complaints Confirmed .. ..	1344	5325	6669
Cowsheds .. ..	287	—	287
Dairies and Milkshops .. ..	686	—	686
Dangerous Structures .. ..	100	—	100
Drains Inspected—Smoke Tests .. ..	2159	167	2326
Chemical Tests .. ..	36	5	41
Colour Tests .. ..	271	—	271
Drains Inspected .. ..	5665	4460	10125
Ditches and Watercourses .. ..	72	—	72
Entertainment Houses .. ..	66	—	66
Factories .. ..	231	—	231
Fish Frying Premises .. ..	124	—	124
Food Manufacturing Premises .. ..	338	—	338
Food Warehouses .. ..	266	—	266
Houses re Contagious Disease .. ..	1331	—	1331
Houses re Contagious Disease Contacts .. ..	566	—	566
Houses re Disinfection .. ..	410	—	410
Houses re Overcrowding .. ..	438	—	438
Houses re Vermin .. ..	322	—	322
Housing Acts—Houses .. ..	873	3028	3901
Other Buildings .. ..	30	120	150
Housing Acts (Slum Clearance) :			
Section 25—Houses .. ..	637	402	1039
Other Buildings .. ..	1	24	25
Section 11—Houses .. ..	78	182	260
Special Visits .. ..	1282	—	1282
Houses Let in Lodgings—Day .. ..	138	—	138
Hotel and Restaurant Kitchens .. ..	121	—	121
Ice Cream Premises .. ..	59	—	59
Markets—Cattle .. ..	152	—	152
Retail Meat .. ..	436	—	436
Fish and Fruit .. ..	553	—	553
Wholesale Fish and Fruit .. ..	803	—	803
Wholesale Meat .. ..	664	—	664
Wholesale Tripe .. ..	20	—	20
Carried forward	28967	17900	46867

	Inspections.	Re-inspections.	Total.
Brought forward	28967	17900	46867
Meeting with Owner or Tradesman	3039	—	3039
Merchandise Marks Act .. ..	734	—	734
Offensive Trade Premises .. ..	120	—	120
Piggeries .. .. .	101	—	101
Shops—Meat .. .. .	878	—	878
Fish .. .. .	169	—	169
Fruit .. .. .	231	—	231
Other Food Shops .. ..	590	—	590
Shops Acts .. .. .	1570	2008	3578
Slaughterhouses—Corporation ..	2294	—	2294
Private .. .. .	4774	—	4774
Schools .. .. .	103	—	103
Smoke Observations .. .. .	345	—	345
Special Visits re Smoke .. .. .	317	—	317
Special Visits .. .. .	2964	—	2964
Sewers, etc. .. .. .	120	—	120
Street Gullies .. .. .	5	—	5
Streets or Back Roads .. .. .	32	—	32
Stables .. .. .	54	—	54
Tips .. .. .	32	—	32
Urinal—Public .. .. .	61	—	61
Private .. .. .	229	—	229
Van Dwellings .. .. .	61	—	61
Workshops and Workplaces (excluding Bakehouses) .. ..	386	—	386
Yards and Courts .. .. .	1470	—	1470
Grand Totals .. .. .	49646	19908	69554

Notices—Served	—Informal	..	..	..	1465
	—Formal	..	..	..	49
Complied with	—Informal	..	..	..	960
	—Formal	..	..	..	20
Samples—Food and Drug Acts	..	..	..	..	1673
Water .. .. .	..	..	..	..	129
Bacteriological .. .. .	..	..	..	..	634
Shell Fish .. .. .	..	..	..	..	39
Milk for T.B. .. .. .	..	..	..	..	193
Rag Flock Act .. .. .	..	..	..	..	6
Fertiliser and Feeding Stuffs Act	..	..	..	..	16

### CANAL BOATS.

The whole of the “available” boats on the register, viz., 51, are “Narrow” boats. Thirty-two boats were inspected during the year, these were occupied by 28 males, 18 females, and 18 children over five years, and 10 children under five years.

The condition of the boats was clean and satisfactory.



**TABLE OF CESSPOOLS, PRIVIES AND PAIL CLOSETS IN CITY.**

	Cesspools.	Privies.	Pail Closets.	Chemical Closets.
No. remaining December, 1937 .. .. .	153	—	141	3
No. abolished during year 1938 .. .. .	51	—	13	—
No. remaining December 1938 .. .. .	102	—	128	—

Extraordinarily good progress has been made with the abolition of Cesspools during the year. This has been made possible by the construction by the City Surveyor's department of a new sewer along Spencefield Lane from Uppingham Road to Evington Village.

The overflowing of Cesspools in this district had been the cause of very many complaints.

### **COWSHEDS.**

The number of cowsheds in the city is being reduced steadily, chiefly by the using up of farm land for house building.

One new cowshed for forty cows was completed during the year, together with a boiler house, sterilising room, milk cooling and bottling room and a milk store. This shed now accommodates a Tuberculin Tested herd of cows.

**Insanitary Cowshed.** Statutory action was taken against a cowkeeper in respect of dilapidated and unsuitable cowshed premises where he was producing milk. Eventually he discontinued using the premises and they have since been demolished.

Number of Dairy Farms in city at end of 1938 ..	21
Number of Cows in city at end of 1938 .. ..	431

### **DISINFECTION.**

The total number of articles of clothing, bedding, &c., disinfected by steam during the year was 2,709. The number of houses or parts of houses disinfected was 2,152.

The above figures include clothing, bedding, &c., from 10 houses which were found to be in a verminous condition.

## DISINFESTATION

Particulars in accordance with Circular 1561 of action taken for the eradication of bed bugs.

1. (a) The number of Council houses found to be
  - (i) infested—190.
  - (ii) disinfested—190
- (b) The number of other houses found to be
  - (i) infested—466
  - (ii) disinfested—466
2. The methods employed for freeing infested houses from bed bugs were as follow :—
  - (a) In the case of Council houses and other houses in active occupation the method was by Sulphur Candles and Insecticide Spray.
  - (b) In the case of houses previous to demolition, in 772 instances Hydrogen Cyanide was used, and in 21 instances Insecticide Spray, as fumigation with Hydrogen Cyanide was impracticable.
3. The methods employed for ensuring that the belongings of tenants are free from vermin before removal to Council houses are as follow :—

Fumigation with Hydrogen Cyanide was done in all cases where removal was from slum clearance property. No action was taken in other cases.
4. The work of disinfestation was carried out by a contractor employed by the Local Authority.

## PUBLIC HEALTH ACT, 1936.

Cleansing of verminous persons and their clothing.

Six cases were dealt with where persons were infested with body lice.

The persons were given a bath at a Public Assistance Department Institution and in the meantime their clothes and beds were treated in a steam disinfectant and their bedrooms fumigated with sulphur dioxide.

Three cases were from Common Lodging Houses and three were persons living under very insanitary conditions.

**Cleansing of filthy or verminous premises.**

At the end of last year and the early part of this year a most unusual case occurred respecting a dwelling-house in a good-class residential district. It was reported as being habitually filthy and verminous, but the occupant—an eccentric spinster—who was also the owner, refused admission to the officials of the Health Department.

An order to enter the premises, if need be by force, was obtained from a Justice of the Peace and an entry was forced on four separate occasions. The woman was aggressive, hostile and obstructive all the time, even when before the magistrates in the Police Court.

Eventually she was certified under the Lunacy Act, 1930, and removed to a mental hospital where she has been detained since.

The house was in a deplorably filthy condition.

Two large “Airedale” dogs, which were kept in the house, were removed and disposed of with the assistance of the R.S.P.C.A.

**DRAINS.**

**Voluntary Cleansing of Stopped Drains by Health Department.**

Seventy-one drains were attended to and of these 56 were unstopped immediately. In the remaining 15 cases the owners’ attention had to be called to them.

**ADMINISTRATION OF FACTORY AND WORKSHOP  
ACT, 1901, and the FACTORIES ACT, 1937.**

In connection with Factories, Workshops, Workplaces and  
Home Work.

**1.—Inspection of Factories, Workshops and Workplaces.**

Premises.  (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories .. ..	231	37	—
Workshops .. ..	386	—	—
Total .. ..	617	37	—



2.—Defects found in Factories, Workshops and Workplaces.

Particulars.  (1)	Number of Defects.		Number of Prosecutions.  (4)
	Found. (2)	Remedied. (3)	
Nuisances under the Public Health Act :—			
Want of Cleanliness ..	5	5	—
Want of Ventilation ..	3	3	—
Overcrowding .. ..	—	—	—
Other Nuisances .. ..	30	6	—
Sanitary Accommodation			
Insufficient .. ..	5	5	—
Offences under the Factory and Workshop Act ..	—	—	—
Total .. ..	43	19	—

3.—Home Work.

The number of lists received from employers was as follows: —

	Twice in the year		Once in the year	
	Lists.	Outworkers.	Lists.	Outworkers
Wearing Apparel (making)	52	491	13	230

4.—Other Matters.

CLASS (1).

Matters notified to H.M. Inspector of Factories :—

Failure to affix Abstract of the Factory and Workshop Acts  
(S. 133, 1901) .. .. . None

Action taken in matters referred by H.M. Inspector as remediable under The Public Health Acts, but not under the Factory and Workshop Acts (S. 5, 1901)	Notified by H.M. Inspector	44
	Reports (of action taken) sent to H.M. Inspector	44

Underground Bakehouses (S. 101) in use at the end of the year 1

IMPROVEMENTS TO HOUSES.						No. of Houses.
Separate internal water supply in place of taps in common yards	..	..	..	..	..	125
Additional water closets	..	..	..	..	..	240
Houses formerly with common yards and common sanitary conveniences, which have now been provided with separate yards, separate sanitary conveniences, internal sinks, taps, &c.	..	..	..	..	..	389

### HOUSING ACT, 1930.

Removals from Clearance Areas : Nos. 9 (St. Mark's Street and Grove Street) C.P.O., 27 (Dryden Street) C.O. and C.P.O., 29 (Lee Street) C.O. and C.P.O., 35 (Gravel Street) C.P.O., 36 (Burley's Lane) C.P.O., 40 (Archdeacon Lane), 41 (Foundry Lane).

### HOUSING ACT, 1936.

Removals from Clearance Areas : Nos. 43 (Bath Street), 49 (Northgate Street No. 1), 50 (Palmer Street No. 1), 52 (Navigation Street) C.O. and C.P.O., 55 (Brierley Street), 56 (Bath Street), 57 (Curzon Street), 58 (Marble Street), 59 (Victoria Street), 60 (Dover Street No. 1), 61 (Dover Street No. 2), 62 (Albion Hill No. 1), 63 (Northgates), 64 (Cumberland Street), 66 (Sanvey Gate No. 2), 67 (Causeway Lane No. 1) C.O. and C.P.O., 68 (Causeway Lane No. 2), 71 (Church Gate No. 1), 74 (Blake Street) C.O. and C.P.O., 76 (West Bond Street), (77 Freeschool Lane), 78 (Blue Boar Lane) C.O. and C.P.O., 79 (Sycamore Cottages, Great Central Street), 80 (Old Mill Lane), 81 (Royal Kent Street), 82 (Craven Place), 84 (Barston Street No. 1), 85 (Barston Street No. 2), 87 (Malta Cottages, Mount Road), 90 (Chatham Street No. 1), 92 (Dover Street No. 3), 95 (Calais Street No. 1) and 98 (Victoria Cottages, Friday Street), to the Braunstone Estate.

No. of families re-housed.		No. of persons re-housed.	No. of new houses used for re-housing.
Sec. 25.	591	1,794	591
Sec. 11.	15	48	15

This table will not correspond with the quarterly reports (H. 256), as some of the houses vacated have not yet been demolished.

## FOOD SUPPLIES—SUPERVISION OF.

The whole of the Sanitary Inspectors on the staff, 29 in number, are qualified Inspectors of Meat and Other Foods and they all take a part in the supervision of the food supplies of the city.

Routine inspections were carried out at our Markets during the times they were held and no special difficulties have been encountered.

There was a seizure of a rather large quantity of Tuberculous beef (from five animals) which was found deposited in a butcher's shop for sale. It was proved and admitted that the animals were slaughtered outside the district of this local authority and the officials of the other local authority concerned were interviewed about the matter.

### Control of Slaughtering done at Cattle Market.

Control of the slaughtering at the Cattle Market has been much improved by the construction of the barrier at the entrance to the Market, the gates being closed at certain hours each day.

## SUMMARY OF FOODSTUFFS CONDEMNED.

TABLE A.

				Tons.	Cwts.	Qrs.	Lbs.
Meat	..	..	..	112	13	0	24
Fish	..	..	..	17	12	1	4
Fruit	..	..	..	1	11	1	18
Vegetables	..	..	..	22	7	2	7
Rabbits	..	..	..	..	..	3,431	
Preserved Foods (Tinned Goods)					..	10,004	
Poultry	..	..	..	..	..	55	
Eggs	..	..	..	..	..	1,860	
Hares	..	..	..	..	..	65	
Chickens	..	..	..	..	..	198	
Bacon	..	..	..	..	..	69 lbs.	
Watercress	..	..	..	..	..	10 lbs.	



TABLE B.

Total weights of British and Imported Meat and Offal rejected, at various premises.

		Tons.		Cwts.		Qrs.		Lbs.	
British Meat		..	84	13	1	5			
Imported Meat		..	1	4	—	17			
British Offal		..	26	—	2	27			
Imported Offal		..	—	15	—	3			
Total Weight		..	112	13	—	24			

		British Meat.				Imported Meat.				British Offal.				Imported Offal.			
		Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.
Shops .. ..		—	1	1	19	—	1	—	25	—	—	2	6	—	—	—	—
Private Slaughterhouses ..		14	5	2	19	—	—	—	—	3	18	3	25	—	—	—	—
Cattle Market .. ,		69	19	2	19	—	1	3	8	22	1	—	24	—	—	—	—
Cold Stores .. ..		—	—	3	26	—	—	3	26	—	—	—	—	—	—	—	—
Retail Market .. ..		—	—	3	8	—	—	—	—	—	—	—	—	—	—	—	—
Wholesale Market ..		—	4	2	26	1	—	—	14	—	—	—	—	—	15	—	3
Totals .. ..		84	13	1	5	1	4	—	17	26	—	2	27	—	15	—	3

TABLE C.  
Total weights of Carcases, Parts of Carcases, and Offal, rejected for all diseases.

	Carcase.				Parts of Carcase.				Offal.				Total.		
	Tons.	Cwts.	Qrs.	Lbs.	Tons	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.	Lbs.	Tons.	Cwts.	Qrs.
	Lbs.														
Tuberculosis ..	30	4	3	19	28	19	0	6	15	9	3	16	74	13	3
Other defined Diseases ..	21	15	1	23	4	18	0	2	11	5	3	14	37	19	1
Totals ..	52	0	1	14	33	17	0	8	26	15	3	2	112	13	0
															24

TABLE D.  
Total number of Carcases found affected, for various diseases.

Carcases affected with Tuberculosis.	Carcases affected with other defined diseases.	Total number of Carcases affected. (All diseases)
3699	2600	6299

Number of healthy Carcases examined not available.

TABLE E.  
Number of Carcases showing evidence of Tuberculosis and number of entire Carcases rejected.

	Beasts.	Calves.	Sheep.	Pigs.	Total.
Number of Carcases affected ..	1301	3	-	2395	3699
Number of entire Carcases rejected ..	104	3	-	58	165

TABLE F.  
Total number of Carcases rejected for Tuberculosis and other defined diseases.

Disease.	Bulls.	Cows.	Heifers.	Bullocks.	Calves.	Sheep.	Lambs.	Pigs.	Total of all Carcases.
Tuberculosis ..	1	62	26	15	3	—	—	58	165
Other defined diseases ..	—	46	5	7	17	264	13	64	416
Totals ..	1	108	31	22	20	264	13	122	581

TABLE G.  
Total number of all Carcases, parts of Carcases, and Offal, rejected for all diseases.

Disease.	Carcases.	Parts of Carcases.	Offals of Carcase.	Total number affected
Tuberculosis .. ..	165	3092	442	3699
Other defined diseases ..	416	325	1859	2600
Totals .. ..	581	3417	2301	6299

TABLE H.  
Total number of Carcases, parts of Carcases and Offal condemned in :—

	Carcases.	Parts of Carcases.	Offals of Carcase.	Total number affected.
Corporation Slaughterhouses (including Co-operative Society Slaughterhouse at Cattle Market) .. ..	456	2751	1893	5100
Private Slaughterhouses ..	120	598	342	1060
Shops, Markets and other Premises .. ..	5	68	66	139
Totals .. ..	581	3417	2301	6299



TABLE I.  
Tabulated List of other defined Diseases and their incidence in Carcases rejected.

Disease.	Cows.	Heifers.	Bullocks.	Calves.	Sheep.	Lambs.	Pigs.	Total.
Malignant Neoplasm ..								3
Dropsy ..	3	1	1	2	199	5	1	211
Fever—Acute ..	2	2	1	1	4		1	11
Physicked ..							1	1
Pneumonia ..			1		2		2	5
Decomposition ..	2			1	9	1	1	14
Emaciation ..	1				6			7
Asphyxia ..					1		2	3
Dead Animals ..	1				34	3		64
Immaturity ..				9		2	26	11
Bruising—Extensive ..	2			1	3	1		7
Anthrax ..	1							1
Septic Metritis ..	3							3
Septicæmia ..	2		1	1	1		2	7
Gangrene ..					2			2
Johnnes' Disease ..	26	1	3					30
Jaundice ..		1					4	5
Swine Erysipelas ..							10	10
Acute Enteritis..				1		1	7	9
Swine Fever ..							4	4
Septic Mastitis..	2				3			5
Uræmia ..	1			1			1	2
Actinomycosis ..								1
Total ..	46	5	7	17	264	13	64	416

## **Inspection of Dairy Cows.**

The County Health Department have been good enough to supply the following information respecting the veterinary services performed for the Leicester City Council during the first quarter of the year.

“The following veterinary services were performed for the Leicester City Council during the quarter ended 31st March, 1938 :

## **Milk and Dairies (Consolidation) Act, 1915.**

No reports under Section 4 of the above Act were received during the quarter notifying the presence of tubercle bacilli in samples of milk produced within the City.

## **Milk (Special Designations) Order of 1936.**

One Tuberculin Tested herd of 39 cows in milk and one bull was examined. No pathological conditions were discovered.

Visits were made to three farms licensed as Accredited producers of milk. (Note.—One other farm was licensed as Accredited later in the year). 84 cows in milk and 21 dry cows, a total of 105, were examined. The general standard of health was good. Three cows were found with indurations of the udder and milk samples from these animals were examined microscopically but did not reveal tubercle bacilli.

## **Milk and Dairies Order, 1926.**

Sixteen producers of ungraded milk were visited and the animals on their premises, 291 milking cows, 37 dry cows or heifers, a total of 328, which were examined, were generally in good health. One cow was reported to be suffering from tuberculosis with chronic cough. Two animals had indurated quarters and one an enlarged supramammary gland. Milk samples from these three cows were negative for tubercle on microscopical examination.”

The following report has been received from the local office of the Ministry of Agriculture and Fisheries on work carried out during the remainder of the year :

## **Milk and Dairies (Consolidation) Act, 1915.**

Three reports notifying the presence of tubercle bacilli in samples of milk produced in the City were received during the year under Section IV of the above Act. The details are as follow :—

Date of investigation 1938	Cows removed after original sample taken	Cows examined		Tuberculous cows found	
		In milk	Dry	Udder	Other
(1) 19th May	3	7	—	1	—
(2) 10th June	2	20	—	—	—
(3) 25th Aug.	5	20	1	2	—

**Milk (Special Designations) Orders 1936 and 1938.**

**Tuberculin Tested.** One herd in the City is tuberculin tested. The statutory examinations were carried out.

**Accredited.** Four herds are Accredited. These were examined every three months from 1st April. One case of Mastitis was reported by the veterinary inspector and two cattle were slaughtered under the Tuberculosis Order 1938. The total number of cattle examined in this grade was 564, made up of 486 milking cows ; 44 dry animals and 34 other bovine animals.

**Milk and Dairies Order, 1926.**

Seven ungraded herds were examined, comprising 129 milking cows ; one dry cow and three other bovine animals. One cow affected with tuberculosis of the udder was dealt with under the Tuberculosis Order, 1938.

**Milk Traders—Licensing and Registration.**

		Number	Number refused	Number granted
<b>Milk and Dairies Order 1926.</b>	Application for registration of premises as "dairies"	16	7	9
	Application for registration of persons as "dairymen"	265	—	265
<b>Milk (Special Designations) Order 1936.</b>	*Application from cow-keeper to use designation "Tuberculin Tested."	1	—	1
	Applications from cow-keepers to use designation "Accredited"	4	—	4

\* This is the first Tuberculin Tested Herd for which a licence has been issued by this local Authority. There are 39 cows in milk in this herd.



## SAMPLING.

### Samples of water taken during 1938.

				Chem.	Bac.
Leicester mains	..	..	..	67	94
Well waters	..	..	..	12	16
Miscellaneous samples taken when investigating nuisances		..		—	—
				—	—
Totals	..	..		79	110
				—	—

### Foods and Drugs (Adulteration) Act.

#### NUMBER OF SAMPLES TAKEN FOR CHEMICAL ANALYSIS.

1934	1935	1936	1937	1938
1099	1025	1403	1697	1673

Number of Samples taken under Fertilisers and Feeding Stuffs Act, 1926	..	..	..	..	..	..	..	16
Number of Samples taken under Rag Flock Act, 1911						..		6

### Milk (Special Designations) Order, 1923.

#### NUMBER OF SAMPLES TAKEN FOR BACTERIOLOGICAL EXAMINATION.

1934	1935	1936	1937	1938
380	362	575	616	634

## FOOD AND DRUGS.

### ADMINISTRATIVE ACTION REGARDING SAMPLES NOT REPORTED TO BE GENUINE.

(For details of analysis, see Report of the Public Analyst, page 215.)

#### Milk Samples Reported Not Genuine. (Chemical examination)

Sample No.	Article.	Formal.	In-formal.	Remarks.
1924	T.T. Past. Milk	—	1	Repeat sample reported "genuine." Written caution sent.
1933	Accredited Milk	—	1	Repeat samples reported "not genuine." See Nos. 2019, 2020 and 2021.
2019	Milk	1	—	Taken in connection with No. 1933. Referred to Leicestershire County Authority for action.
2020	"	1	—	
2021	"	1	—	
1946	T.T. Cert. Milk	—	1	Repeat sample reported "genuine." Written caution sent.
303	Sterilised Milk	—	1	" "
1988	T.T. Cert. Milk	—	1	" "
311	Accredited Milk	—	1	" "
1691	Milk	1	—	" "
2172	"	1	—	Repeat sample reported "not genuine." See No. 2174.
2174	"	1	—	Taken in connection with No. 2172. Follow-up samples reported "genuine." No further action taken.
2251	"	1	—	Repeat sample reported "genuine." Written caution sent.
389	Accredited Milk	—	1	Repeat sample taken and reported "genuine."
291	Milk	1	—	Repeat sample reported "genuine." Written caution sent.
543	"	1	—	" "
2343	Accredited Milk	—	1	Investigation carried out at farm.
2353	T.T. Cert. Milk	—	1	Referred to County Authority for action.
2356	Pasteurised Milk	—	1	Repeat sample reported "genuine." Written caution sent.
444	Milk	1	—	" "
1120	T.T. Cert. Milk	1	—	Repeat sample reported "not genuine." See No. 139.

**Milk Samples Reported Not Genuine—*continued.***

Sample No.	Article.	Formal.	In-formal.	Remarks.
139	Milk	1	—	Taken in connection with No. 1120. Follow-up sample reported "not genuine." See No. 142.
142	"	1	—	Taken in connection with No. 139. Written caution sent.
486	"	1	—	Written caution sent.
1167	T.T. Past. Milk	—	1	Repeat sample reported "genuine." Written caution sent.
836	Milk	1	—	Repeat sample taken and reported "genuine."
884	"	1	—	" "
190	"	1	—	Repeat sample reported "not genuine." See No. 914.
197	"	1	—	Repeat sample reported "not genuine." See No. 915.
914	"	1	—	Taken in connection with No. 190. Fault in Pasteurising Plant. Steps taken to rectify same.
915	"	1	—	Repeat of No. 197. Fault in Pasteurising Plant. Steps taken to rectify same.
M602	"	Private	}	Fault in Pasteuring Plant.
M605	"	"		Followed up by other samples.
M607	"	"		See Nos. 936 and 1701.
936	"	1	—	} Fault in Pasteurising Plant. Steps taken to rectify same.
1701	"	1	—	
31	"		1	Written caution sent.
891	"	—	1	" "
892	"	—	1	" "



# Samples other than Milk Reported Not Genuine.

Sample No.	Article.	Formal.	In-formal.	Remarks.
1807	Butter	—	1	Written caution sent.
282	„	—	1	„ „
294	Ice Cream	—	1	„ „
297	„	—	1	„ „
298	„	—	1	„ „
1812	Margarine	—	1	„ „
159	Potted Beef	—	1	Repeat sample reported “not genuine.” See No. 166.
166	„	—	1	Taken in connection with No. 159. Written caution sent.
874	Potted Meat	—	1	Vendor interviewed.
2276	Raspberry Jam	—	1	Repeat sample taken and reported “genuine.”
2175	Sausage	—	1	Repeat sample reported “genuine.” Written caution sent.
2177	„	—	1	„ „
2178	„	—	1	Repeat sample reported “not genuine.” See No. 2183.
2183	„	1	—	Taken in connection with No. 2178. Written caution sent.
2275	Sugar (Demerara)	—	1	All sugar on sale withdrawn.
2284	„ (Barbadoes)	—	1	
260	„ (Demerara)	—	1	
261	„ „	—	1	
265	„ (Dark Brown)	—	1	
279	Self-Raising Flour	—	1	Repeat sample reported “genuine.” Written caution sent.
815	Shredded Suet	—	1	Repeat sample reported “not genuine.” See No. 972.
972	„	1	—	Taken in connection with No. 815. Written caution sent.
991	„	—	1	Written caution sent.
1000	Malt Vinegar	—	1	Enquiries made into copper content.
18	Vinegar	—	1	Repeat sample reported “not genuine.” See No. 53.
53	„	1	—	Taken in connection with No. 18. Legal proceedings taken— case dismissed.
898	Malt Vinegar	—	1	Written caution sent.

**Samples other than Milk Reported Not Genuine—continued.**

Sample No.	Article.	Formal.	In-formal.	Remarks.
S69	Watercress	Private	—	M.O.H. communicated with vendors and notice issued to public regarding cleaning of Watercress.
497	Beer	—	1	Written caution sent.
182	„	—	1	} Licensed Victuallers Association communicated with.
186	„	—	1	
199	„	—	1	
200	„	—	1	
844	„	—	1	
986	Whiskey	—	1	Repeat sample reported “genuine.” Written caution sent.
2240	Peeled Shrimps	—	1	Surrendered by Vendor.
S71	„	Private	—	„ „
622	Mussels	—	1	} M.O.H. communicated with town from where mussels emanated.
623	„	—	1	
635	„	—	1	
636	„	—	1	
639	„	—	1	
640	„	—	1	
642	„	—	1	
645	„	—	1	
646	„	—	1	
654	„	—	1	
655	„	—	1	
659	„	—	1	
1847	Bismuth			
	Lozenges B.P.	—	1	Written caution sent.
850	Borax	—	1	„ „
S74	Borax	Private	—	Repeated. See No. 988.
988	„	—	1	Taken in connection with S74. Written caution sent.
450	Lime Water	—	1	Written caution sent.
451	„	—	1	„ „
454	„	—	1	„ „
579	Spirit of Sal Volatile	—	1	Repeat sample reported “not genuine.” See No. 588.
585	„	—	1	Repeat sample reported “not genuine.” See No. 589.

**Samples other than Milk Reported Not Genuine—*continued.***

Sample No.	Article.	Formal.	In-formal.	Remarks.
588	Spirit of Sal Volatile	1	—	Taken in connection with No. 579. M.O.H. interviewed vendors.
589	„	1	—	Taken in connection with No. 585. M.O.H. interviewed vendors.
F88	Basic Slag	—	1	Written caution sent.
F83	Sussex Ground Oats	—	1	
F89	„	1	—	„ „ Legal proceedings. Case dismissed on point of law re laying of information.
F96	Meat and Bone Meal	—	1	Written caution sent.  Manager of firm interviewed and cautioned.
F91	Sulphate of Ammonia	—	1	
F92	Hoof and Horn Meal	—	1	
F93	Super-Phosphate of Lime	—	1	
F97	Sulphate of Ammonia	—	1	

**EXAMINATION OF MILK FOR PRESENCE OF TUBERCLE BACILLI.**

**Milk and Dairies (Consolidation) Act, 1915.**

Number of Samples of Milk taken for microscopical and biological examination for Tubercle Bacilli—

Year.	1934	1935	1936	1937	1938
Number taken ..	171	164	175	176	193
Percentage containing Tubercle Bacilli	1.17	3.0	5.14	6.82	6.22



### Details respecting samples taken, 1938.

	Number of Samples taken.	Number reported containing Tubercle Bacilli.	Number reported negative.	Number unsatis- factory although negative as regards Tubercle Bacilli.
Cowkeepers with registered prem- ises within City boundaries ..	61	6	51	4
Cowkeepers with premises out- side City boundaries ..	132	6	107	19
Totals ..	193	12	158	23

#### City Herds.

Of the 61 samples of milk produced inside the City 51 were reported negative ; six were reported positive (these were referred to the Veterinary Officer immediately for action and three animals were slaughtered under the Tuberculosis Order) ; and four were reported as unsatisfactory although negative as regards tubercle bacilli.

The post-mortem examinations of guinea pigs inoculated with milk for which unsatisfactory reports were received are as follow :—

3 samples :	1st report.	Animal died from causes other than T.B.
	2nd report.	Negative.
1 „	Both animals died from causes other than T.B.	This sample was repeated and reported negative.
4 „	Total.	

#### County Herds.

Of the 132 samples taken from Cowkeepers with premises outside the City boundary 107 were reported negative ; six were reported positive (these were referred to the County Authority for action and one cow was slaughtered under the Tuberculosis Order) ; and 19 were reported as unsatisfactory although negative as regards tubercle bacilli.

The post-mortem examinations of guinea pigs inoculated with milk for which unsatisfactory reports were received are as follow :—

16 samples :	1st report.	Animals died from causes other than T.B.
	2nd report.	Negative.
2 „	Both animals died from causes other than T.B.	These samples were repeated and reported negative.
1 „	1st report.	Negative.
	2nd report.	Animal died from causes other than T.B. This sample was repeated and reported negative.
19 „	Total.	

## OFFENSIVE TRADES.

Particulars of all offensive Trades in the City.

Number of Tripe Dressers	..	..	..	..	..	12
„ Marine Store Dealers	..	..	..	..	..	13
„ Tallow Melters	..	..	..	..	..	1
„ Fellmongers	..	..	..	..	..	1

## RENT RESTRICTIONS ACTS, &c.

One certificate was issued under the above Acts.

## SHOPS ACTS, 1912-1934.

The first inspection of shop premises, i.e., retail and wholesale shops and warehouses, has now been completed. Hotels, public houses and picture houses are being inspected separately, and in some cases only a section of the premises and employees come under the jurisdiction of the Shops Acts.

During the year 682 meetings with owners, employers or their representatives took place, and, as previously, most of the work done has been accomplished by informal action, and it was necessary to serve only one statutory notice.

In some parts of the City shop premises repeatedly change hands which necessitates continual re-inspection in order to ascertain if the available accommodation is adequate and satisfactory for the new staff employed.

The question of temperature and ventilation also arises when the nature of the business is changed.

With regard to the provisions of maintaining a reasonable temperature for the welfare of the employees, a great deal remains to be done. Only a very small percentage of meat traders, fishmongers and fruiterers have heating appliances fitted in their shops. A few other traders who have appliances fitted do not always use them, and a reasonable temperature is not continuously maintained.

On inspection of hotels, public houses and hairdressing establishments, defects other than those enforceable under the Shops Acts have been discovered, such as wash-hand basins without proper waste pipes, inadequate facilities for washing glasses, etc., urinals of defective construction and without flushing apparatus, and water-closets not screened. These matters are receiving attention and the Brewery Companies generally are willing to modernise their accommodation in accordance with our requirements.

Only two applications were received for “exemption certificates” ; one of these was granted and the other was not. The Act of 1934 provides for the issue of exemption certificates under certain circumstances, following the serving of notices re sanitary accommodation, washing facilities, etc.

Every application made is considered by the Health Committee.

In the administration of these Acts it is necessary to keep in close touch with the Home Office (Factory Dept.) local staff, as it is not easy at times to determine whether the staffs employed by certain firms come under the jurisdiction of the Shops Acts or the Factory Acts.

## SLAUGHTERHOUSES.

### Particulars of all Slaughterhouses in the City.

Registered Private Slaughterhouses .. .. .	36
Licensed Private Slaughterhouses (includes two Knackers' Yards) .. .. .	3
Corporation Slaughterhouses situated at Cattle Market and let off as Private Slaughterhouses .. .. .	19
Corporation Slaughterhouses situated at City Hospitals :	
City Mental Hospital .. .. .	1
City General Hospital .. .. .	1
	—
Total Slaughterhouses .. .. .	60
	—

The slaughtering rights of two private slaughterhouses were acquired by the Corporation under the Leicester Corporation Act, 1897, and compensation was paid to the owners.

## SMOKE ABATEMENT.

### Action taken re smoke nuisances :—

Observations taken of chimney stacks .. .. .	345
Chimneys reported for causing nuisance .. .. .	10
Cautions by Inspectors .. .. .	10
Interviews of Engineers or Stokers by Inspectors .. .. .	10
Informal Notices or Letters sent .. .. .	10
Prosecutions .. .. .	—

## LEGAL PROCEEDINGS.

Public Health Acts .. .. .	5
Merchandise Marks Act, 1926 .. .. .	1
Housing Act, 1936 .. .. .	1
Fertilizer and Feeding Stuffs Act, 1926.. .. .	1



# LEGAL PROCEEDINGS.

Acts, Bye-laws or Regulations under which proceedings were instituted.	Default or Offence.	Result.	Fines. £ s. d.	Costs. £ s. d.
Public Health Acts	Exposing meat unfit for food	Three Convictions : (1) First Count (2) Second Count (3) Counselling and procuring	5 0 0 5 0 0 10 0 0	— — —
Ditto.	Ditto.	Conviction Payment of costs in nine cases	10 0 0 —	— 2 5 0
Ditto.	Non-compliance with sanitary notice to cleanse filthy and verminous house	Order made by Court to abate nuisance within twenty-eight days	—	4 0
Ditto.	Failure to close six polluted wells. Five owners concerned	Order of Court that the well water not to be used for human consumption	—	4 0
Ditto.	Non-compliance with sanitary notice. Habitually filthy condition of house	Order of Court to abate nuisance within seven days	—	4 0
Merchandise Marks Act, 1926	Exposing foreign meat for sale and removing indication of country of origin	Conviction	3 0 0	—
Housing Act, 1936	Overcrowding	Summons withdrawn Overcrowding—Abated	—	—
Fertilizer and Feeding Stuffs Act, 1926	False particulars marked on parcel of ground Oats	Case dismissed	—	—

F. G. McHUGH, M.R.San.I., M.S.I.A., *Chief Sanitary Inspector.*



# Report on the Work of the Venereal Diseases Clinics

for the year 1938.

By

C. HAMILTON WILKIE, M.B., Ch.B., B.Sc.

With foreword by the Medical Officer of Health.



## COMMENT BY THE MEDICAL OFFICER OF HEALTH.

1. Personnel. The illness of Dr. Waterson, Lady Medical Officer in charge of the Female V.D. Department at the Royal Infirmary and St. Mary's Home, necessitated her resignation after only a few months' service. Her place has been taken by Mrs. Kathleen M. Lodge, M.B., B.S.Lond.

2. There has been a marked increase in the number of patients suffering from early syphilis.

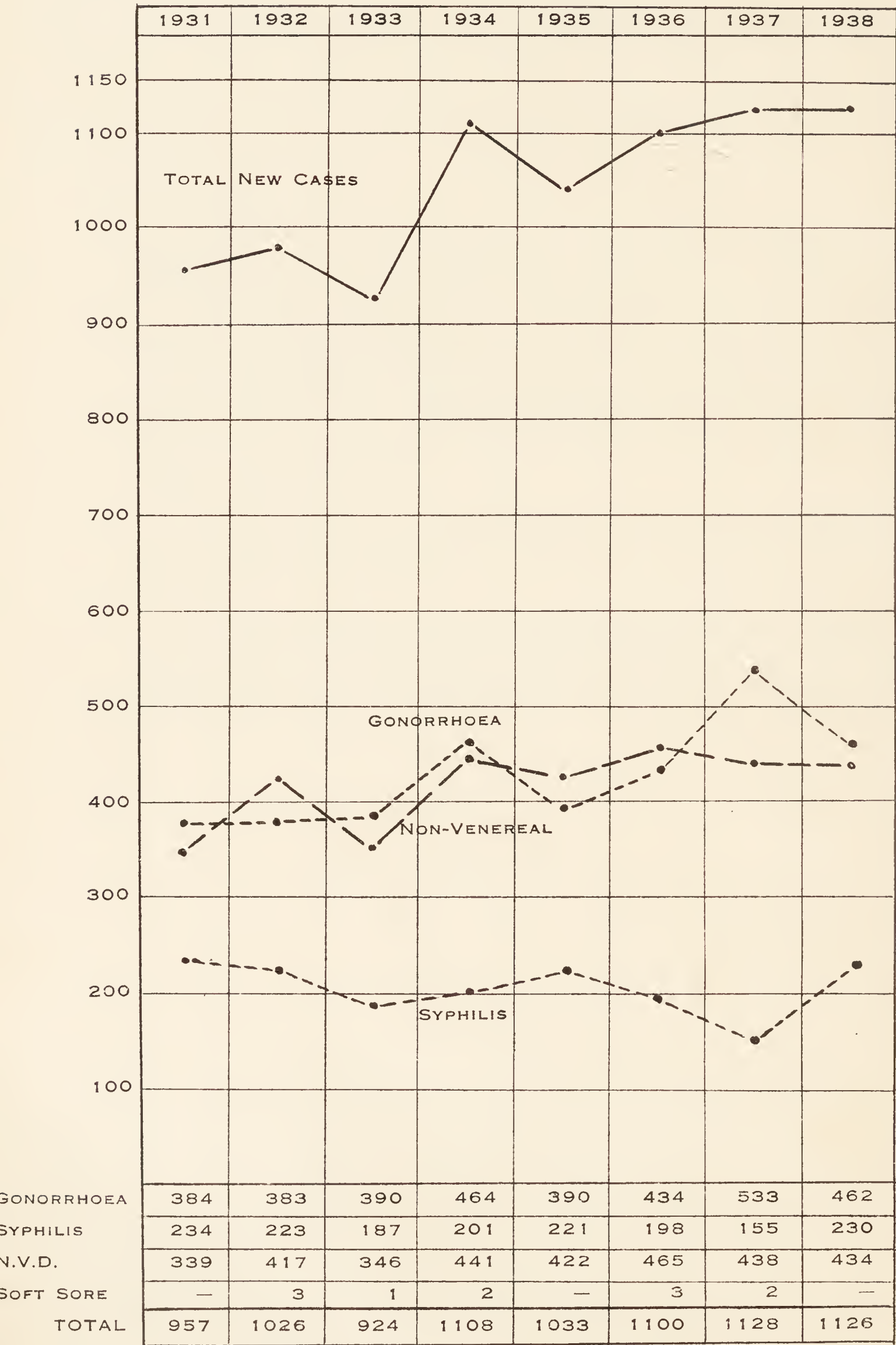
3. An investigation into the value of "Uleron" in the treatment of gonorrhoea has laid emphasis on the need for thorough tests of cure in these cases.



GRAPH 5.

NEW CASES ATTENDING THE VENEREAL DISEASES DEPARTMENT,  
MALE AND FEMALE. CITY AND COUNTY.

"RETURNED DEFAULTERS" AND "TRANSFER FROM OTHER CLINICS"  
INCLUDED.





# Report on the Venereal Diseases Clinics

for the Year 1938.

By

C. HAMILTON WILKIE, M.B., Ch.B., B.Sc.

Director of Venereal Diseases Services.

I herewith submit the Annual Report on the work of the Venereal Diseases Departments at Leicester Royal Infirmary and at St. Mary's Home for the year 1938.

The primary centre, that at Leicester Royal Infirmary, will be reported on first.

## Statistics.

The new cases coming for the first time to the centre at the Royal Infirmary numbered 1,050 ("New Cases"). In 1937 these "New Cases" numbered 1,051. In addition 55 cases reported for the first time who had previously attended some other Venereal Disease Centre ("Transfers IN"). An additional 21 cases who had been removed from the register during some previous year returned in 1938 for treatment or observation of the same infection ("Returned Defaulters").

The total number of "New Cases" "Transfers IN," and "Returned Defaulters" is thus 1,126. For the previous year this number was 1,128.

Table A, shown below, gives details of all the cases, and Graph V shows how the numbers have varied since 1931. The numbers for the graph are taken from the official Ministry of Health Form V.D. (R) (revised). This Form first appeared in 1931.

The most important point concerning the new cases is a marked increase in early syphilitics. Special reference will be made to this later.

The “new” acute and chronic gonorrhoeal cases numbered 421. a decrease of 68 on the previous year.

Non-venereal cases numbered 434, four less than in 1937.

The total number of attendances for the year was 29,505, (1937=32,667). This number may be sub-divided into 15,695 seen by the Medical Officers and 13,810 intermediate attendances not seen by the Medical Officers.

In-patients totalled 179 (1937=200) and the aggregate number of “in-patient days” 4,466 (1937=4,384).

The sources of male infection, when definitely known (long-duration “acquired syphilis” excluded), were as follow :—

Stranger (not financially acknowledged)	..	..	226
So-called “Friend”	..	..	64
Wife (extra-marital exposure emphatically denied and wife proved to have V.D.)	..	..	48
Prostitute (financially acknowledged)	..	..	35
Fiancée, or intended fiancée	..	..	21
Parents or grandparents (i.e., hereditary)	..	..	4

#### Analysis of Male occupations :—

Labourers	..	..	153	Miners	..	..	18
Engineers	..	..	134	Managers	..	..	11
Shop Assistants	..	..	71	Printing	..	..	7
Boot and Shoe	..	..	70	The Services	..	..	6
Building	..	..	61	School Children	..	..	6
Transport	..	..	59	Miscellaneous	..	..	6
Travellers	..	..	57				
Hosiery	..	..	56				
Office Workers	..	..	37	Total	..	..	779
Agriculture	..	..	27				

#### From whom sent (Males only) :—

“Self”	..	..	..	..	..	..	408
Medical Practitioners	..	..	..	..	..	..	225
Other Infirmary Departments	..	..	..	..	..	..	69
“Transfers IN”	..	..	..	..	..	..	49
Female V.D. Department	..	..	..	..	..	..	15
Other members of family	..	..	..	..	..	..	13
Total	..	..	..	..	..	..	779

Numbers from various areas in the County of Leicestershire  
(Male cases only) :—

<i>Area.</i>							<i>No.</i>
Hinckley .. .. .	..	..	..	..	..	..	54
Coalville .. .. .	..	..	..	..	..	..	49
Loughborough .. .. .	..	..	..	..	..	..	49
Melton Mowbray .. .. .	..	..	..	..	..	..	26
Market Harborough .. .. .	..	..	..	..	..	..	21
Lutterworth .. .. .	..	..	..	..	..	..	10
Within five miles of City .. .. .	..	..	..	..	..	..	18
Total .. .. .	..	..	..	..	..	..	227

Males and Females “New Cases.”

				Leicester.	Leics.
Syphilis .. .. .	..	..	..	142	53
Gonorrhoea .. .. .	..	..	..	297	124
Non-Venereal .. .. .	..	..	..	313	121
				752	298

New Male Cases—Married, Single, Widower, or at School :—

Married .. .. .	..	..	..	..	..	..	393
Single .. .. .	..	..	..	..	..	..	371
Widower .. .. .	..	..	..	..	..	..	9
School .. .. .	..	..	..	..	..	..	6
Total .. .. .	..	..	..	..	..	..	779

Age Incidence of New Male Cases :—

Years .. .. .	..	..	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-70
Number .. .. .	..	..	9	42	180	169	127	89	63	37	32	17	14

Male Cases known to have had at least one previous attack of venereal disease numbered 46.

Eleven men had a double infection (Syphilis and Gonorrhoea).

Pathological Work (Male and Female Departments).

Tests for Spirochaetes .. .. .	..	..	..	..	83
Blood tests (W.Rs.) .. .. .	..	..	..	..	1251
Blood tests (Kahn) .. .. .	..	..	..	..	974
Gonococcal C.F.T. .. .. .	..	..	..	..	140
C.S.F. examinations .. .. .	..	..	..	..	70
Smears for Gonorrhoea .. .. .	..	..	..	..	3042
Other tests .. .. .	..	..	..	..	19



## Defaulters and Propaganda Work.

Every effort is being continued to keep our defaulters reduced to a minimum. We in Leicester are particularly fortunate in having a low percentage of defaulters. I believe that our extensive campaign against Venereal Diseases, in the form of Public Lectures (commenced in 1931) has done much in this direction.

The following two Public Lectures were given during the year :—

Wednesday, 30th March, 1938. Little Theatre Hall, Dover Street, Leicester.

For Men only. Speaker, Dr. C. Hamilton Wilkie (Director of V.D. Services).

Thursday, 31st March, 1938. Little Theatre Hall, Dover Street, Leicester.

For Women only. Speaker Dr. Mary Newton-Davis (Assistant Female V.D. Medical Officer).

## Treatment of Venereal Diseases.

The year 1938 has been noteworthy in the history of the treatment of Gonorrhoea. New and far-reaching chemo-therapeutic methods of treating the disease have begun, and although it is yet too early to forecast the ultimate result, one can safely say, at this stage, that it is likely that gonorrhoeal cases will become less numerous in the future. Other factors connected with this new and advanced method of treating Gonorrhoea are likely to appear. Already, however, some Venereal Disease Specialists are reporting a marked increase in "defaulters," who have not been proclaimed cured, although perhaps the more acute signs and symptoms have rapidly disappeared. Other unexpected difficulties may appear.

Leicester Venereal Disease Department has made every effort to keep abreast of the times. During the year I conducted a large investigation on the drug "Uleron" in the treatment of Gonorrhoea. Over 200 cases were treated and a report was published in the *British Medical Journal* (vol. 1, pp. 57 ff., 14th January, 1939). More extensive investigations are being conducted on the use of the drug "M. & B. 693" in male and female Gonorrhoea and I hope soon to publish valuable information on this important branch of medicine.

It is more necessary than ever to place much stress on thorough "tests of cure" for gonorrhoeal cases. Many tests over a considerable period are essential, otherwise, I am afraid, relapses will be common.

## The Increase In Early Syphilitic Cases.

The most important characteristic of the new cases this year is the increase in primary and secondary syphilis. "New" primary and secondary syphilitics number 89 (1937=23). Seventy of these cases were males, nineteen females. The chief source of this increase may probably be traceable to the activities of a few prostitutes who frequent a small area of Leicester. This increase has been reported to the Public Health Department and to the Police. As far as I know, not one of the women in question has reported at the V.D. centre.

### St. Mary's Home

In connection with Venereal Diseases valuable work is done at this Home. The young unmarried girl with venereal disease is very suitably and efficiently treated.

It sometimes happens that the girl is also pregnant. It is then even more essential that she is carefully treated and looked after.

These girls gain much from the extremely important Social Welfare work of the Home. Work, a good home, and perhaps the first real start in life may be given to them.

The Medical Officer in charge of the Female V.D. Department at the Royal Infirmary visits the home twice weekly, once for an out-patient session and once for an in-patient session.

The following are the details of the cases treated in St. Mary's Home for 1938 :—

#### New Cases.

Syphilis	..	9	(4 of these cases had also gonorrhoea. They must be counted as two cases each.)
----------	----	---	---

Gonorrhoea	..	27
------------	----	----

Non-V.D.	..	7
----------	----	---

Total	..	43
-------	----	----

Attendances totalled	..	..	..	..	1076
----------------------	----	----	----	----	------

Extra dressings	..	..	..	..	1476
-----------------	----	----	----	----	------

Injections	..	..	..	..	201
------------	----	----	----	----	-----

#### City General Hospital.

Acting in the capacity of Consultant Venereologist to the City General Hospital I have visited it once per month during the year.

### Concluding Remarks.

The bulk of our new cases come directly, on their own initiative, to the Venereal Disease Clinic. Co-operation with the general practitioners of the area served, with the other hospitals and clinics, and with the other departments of the Royal Infirmary itself, is increasingly evident.

The cost of running the Venereal Disease Department is important. This department has perhaps appeared somewhat extravagant as compared with some centres serving an area of a similar size. But if all factors are taken into consideration, especially the high efficiency, the up-to-date methods, the small number of defaulters, and the high number of definite cures, the cost is reasonable. Our object is to conduct the department economically, but at the same time not to sacrifice efficiency. I believe that to be the correct policy.

In conclusion I should like to acknowledge the valuable assistance and co-operation of all in the Royal Infirmary, the City General Hospital and Public Health Department, who are in any way connected with my department.

The Pathologist, Dr. W. W. Mackarell, does an important and extensive part of our work and the Royal Infirmary dispensers and clerks render valuable assistance. I also appreciate the valuable work done by those within St. Mary's Home.

I wish to thank the Medical Officers of the V.D. Department, the senior male nurse (Mr. A. E. Robertson), Sister J. M. Owen, the nurses and attendants.

(Signed),

C. HAMILTON WILKIE.



TABLE A. (Male and Female Cases).

1938	VENEREAL CASES.				Not V.D.		Totals		Grand Total
	Syphilis		Gon'hoea						
	M.	F.	M.	F.	M.	F.	M.	F.	
Cases on books Jan. 1st, 1938 ..	215	182	149	98	6	1	370	281	651
Returned Defaulters	12	7	1	1	—	—	13	8	21
Syphilis Primary ..	45	5	—	—	—	—	45	5	50
„ Secondary ..	25	14	—	—	—	—	25	14	39
„ Latent 1st year	—	—	—	—	—	—	—	—	—
„ All later stages	53	43	—	—	—	—	53	43	96
„ Congenital ..	4	6	—	—	—	—	4	6	10
Soft Sore .. ..	—	—	—	—	—	—	—	—	—
Gonorrhoea ..	—	—	271	150	—	—	271	150	421
Non-Venereal ..	—	—	—	—	319	115	319	115	434
“Transfers IN” ..	15	1	34	5	—	—	49	6	55
Totals ..	369	258	455	254	325	116	1149	628	1777
Cured and N.V.D'S. Ceased attendance before completion of treatment ..	50	23	176	87	317	109	543	219	762
Ceased attendance after completion of treatment but before all tests .. ..	16	37	35	39	—	—	51	76	127
Transferred OUT	37	10	60	18	—	—	97	28	125
On Records 31.12.38	251	175	129	106	8	7	388	288	676
Attendances (seen by M.O.) .. ..	4215	3789	4053	2660	703	275	8971	6724	15695
Ditto (intermediate)	93	—	8757	4698	187	75	9037	4773	13810
Total attendances	4308	3789	12810	7358	890	350	18008	11497	29505
In-patients .. ..	35	6	50	75	2	11	87	92	179
Aggregate days ..	621	142	1195	2328	7	173	1823	2643	4466

TABLE 21.

## VENEREAL DISEASE CLINICS AT ROYAL INFIRMARY.

NEW PATIENTS ATTENDING FOR THE FIRST TIME. (City Cases only.)

YEAR.	MALES.			FEMALES.		
	SYPH.	GON.	Not. V.D.	SYPH.	GON.	Not V.D.
1922	144	172	18	147	25	9
1923	105	184	23	113	50	28
1924	79	146	41	99	90	41
1925	66	202	50	72	84	42
1926	81	265	44	70	115	38
1927	70	275	90	75	102	79
1928	71	246	117	104	136	60
1929	125	266	106	80	126	42
1930	134	232	117	83	129	67
1931	78	175	151	69	86	90
1932	80	204	201	73	94	115
1933	59	181	160	59	100	79
1934	70	217	218	54	133	32
1935	81	180	207	108	182	145
1936	86	222	227	46	101	99
1937	62	244	242	85	220	90
1938	92	185	229	50	112	84

APPENDIX VIII.

---

FINANCIAL TABLES

(Supplied by City Treasurer)





# CITY GENERAL HOSPITAL.

Income and Expenditure for the two years ended  
31st March, 1939.

EXPENDITURE.								Year 1937-38	Year 1938-39
Salaries and Wages :—								£	£
Medical Staff	..	..	..	..	..	..	..	4717	5149
Nursing Staff	..	..	..	..	..	..	..	8715	9500
Other Staff	..	..	..	..	..	..	..	10527	12509
Corporation's Contributions to Superannuation Fund	..	..	..	..	..	..	..	818	853
Superannuation Allowances under Act of 1896	..	..	..	..	..	..	..	553	568
National Insurance	..	..	..	..	..	..	..	471	649
Provisions :—									
Staff	..	..	..	..	..	..	..	4777	4304
Patients	..	..	..	..	..	..	..	8546	7888
Clothing :—									
Staff	..	..	..	..	..	..	..	356	317
Patients	..	..	..	..	..	..	..	372	317
Drugs and Medical Appliances	..	..	..	..	..	..	..	5143	5163
Fuel, Light and Water	..	..	..	..	..	..	..	4856	5490
Laundry :—Wages and Materials	..	..	..	..	..	..	..	1809	1795
Furniture and Fixtures	..	..	..	..	..	..	..	534	835
Hardware and Crockery	..	..	..	..	..	..	..	465	341
Bedding and Linen	..	..	..	..	..	..	..	830	814
Cleaning Materials	..	..	..	..	..	..	..	309	330
Disinfectants	..	..	..	..	..	..	..	55	30
Education and Training Sundries	..	..	..	..	..	..	..	115	113
Buildings, Plant and Machinery :—									
Additions and Alterations	..	..	..	..	..	..	..	673	709
Renewals and Repairs	..	..	..	..	..	..	..	4124	2881
Painting and Decorating	..	..	..	..	..	..	..	1698	1827
Maintenance of Grounds	..	..	..	..	..	..	..	1002	974
Travelling Expenses and Transport	..	..	..	..	..	..	..	1173	1059
Printing and Stationery	..	..	..	..	..	..	..	548	700
Telephone	..	..	..	..	..	..	..	122	118
Sundries	..	..	..	..	..	..	..	292	325
Rates, Rent and Income Tax	..	..	..	..	..	..	..	2587	2588
Insurance : Fire, &c.	..	..	..	..	..	..	..	99	104
Farm and Garden	..	..	..	..	..	..	..	151	152
Loan Charges :—									
Interest	..	..	..	..	..	..	..	1013	1039
Repayment of Debt	..	..	..	..	..	..	..	1153	1527
Orthopaedic School :—									
Salaries	..	..	..	..	..	..	..	684	680
Books, etc.	..	..	..	..	..	..	..	19	20
Total Expenditure								69306	71668
Less Miscellaneous Income	..	..	..	..	..	..	..	205	246
Net Expenditure for Maintenance	..	..	..	..	..	..	..	£69101	£71422
Net Expenditure per Patient Day	..	..	..	..	..	..	..	s. d. 8 10	s. d. 9 3
INCOME.									
Income for Maintenance :—								£	£
Mental Deficiency Committee	..	..	..	..	..	..	..	8	19
Education Committee	..	..	..	..	..	..	..	3018	2509
Other Local Authorities	..	..	..	..	..	..	..	3022	1834
Relatives, Patients, Ministry of Pensions for Treatment of Ex-Servicemen, and Saturday Hospital Fund.	..	..	..	..	..	..	..	3727	4233
								£9775	£8595
Net Cost (including Loan Charges)	..	..	..	..	..	..	..	£59326	£62827
Number of Patient Days	..	..	..	..	..	..	..	156,400	154,554

# ISOLATION HOSPITAL AND SANATORIUM.

Income and Expenditure for the two years ended  
31st March, 1939.

EXPENDITURE.	Year 1937-38.	Year 1938-39.
	£	£
Salaries and Wages ( <i>see also below</i> ) .. .. .	12902	14176
Superannuation : Corporation's Contributions and Additional Allowances .. .. .	666	736
National and Workmen's Compensation Insurance Provisions .. .. .	264	387
Drugs, Medical Appliances, &c. .. .. .	10310	9872
Fuel, Light, Water and Power .. .. .	3063	3513
Furniture, Bedding and Linen .. .. .	4826	6327
Crockery and Hardware .. .. .	561	832
Clothing and Uniforms .. .. .	323	270
Cleaning Materials .. .. .	283	314
Laundry (including Wages) .. .. .	245	370
Structural Renewals, Repairs and Painting (including Wages) .. .. .	744	762
Grounds, &c. (including Wages) .. .. .	3127	3152
Transport (including Wages) .. .. .	1306	1530
Printing, Stationery, Postage and Telephone .. .. .	922	1675
Rates and Insurance (Fire, &c.) .. .. .	513	505
Miscellaneous .. .. .	1600	1973
Sanatorium School—Salaries, &c. .. .. .	231	163
Occupational Treatment—Wages, Materials, &c. .. .. .	402	20
X-ray and Light Treatment Supplies .. .. .	336	233
Rent .. .. .	936	892
Loan Charges :—	38	—
Interest .. .. .	2551	4497
Repayment of Debt .. .. .	3249	5495
Total Expenditure .. .. .	£49,398	£57,694
Less Sale of Produce (including supplies from Garden, &c., to Institution) and Miscellaneous Income .. .. .	1029	980
Net Expenditure for Maintenance .. .. .	£48,369	£56,714
Net Expenditure per Patient Day .. .. .	9s. 11d.	12s. 2d.
Income for Maintenance of Patients (including Con- tributions by Patients and Relatives in respect of "Home Place" Sanatorium)	518	317
Net Cost (including Loan Charges) .. .. .	£47,851	£56,397
Number of Patient Days .. .. .	97,555	93,100



# HOME PLACE SANATORIUM, HOLT.

Income and Expenditure for the two years ended  
31st March, 1939.

EXPENDITURE.	Year 1937-38.	Year 1938-39.
	£	£
Salaries and Wages ( <i>see also below</i> ) .. .. .	753	776
Superannuation : Corporation's Contributions ..	20	21
Insurance (National and Workmen's Compensation)	25	30
Rates and Land Tax .. .. .	91	154
Heat, Light and Water .. .. .	232	269
Provisions .. .. .	1032	1073
Medical Requisites .. .. .	12	68
Pneumothorax Treatment .. .. .	—	56
Laundry .. .. .	36	36
Cleaning Materials .. .. .	34	47
Buildings, &c.—Repairs and Painting .. .. .	456	265
Upkeep of Grounds, &c. (including Wages) ..	449	441
Travelling Expenses and Transport .. .. .	162	122
Furniture and Bedding .. .. .	119	51
Pigs and Poultry .. .. .	118	105
Insurance—Fire, &c. .. .. .	7	6
Miscellaneous .. .. .	83	77
Total Expenditure .. .. .	£3629	£3597
Less Sale of Produce (including supplies from Garden to Institution) and Miscellaneous Income	183	206
Net Expenditure for Maintenance .. .. .	£3446	£3391
Net Expenditure per Patient Day .. .. .	8s. 3d.	8s. 5d.
Number of Patient Days .. .. .	8332	8022

(Note : Contributions from Patients are credited to Isolation Hospital  
and Sanatorium)

# MATERNITY HOME, WESTCOTES DRIVE.

Income and Expenditure for the two years ended  
31st March, 1939.

	Year 1937-38.	Year 1938-39.
EXPENDITURE.		
	£	£
Salaries, including Medical Fees ( <i>see also below</i> ) ..	1042	1616
Superannuation : Corporation's Contributions ..	50	59
Insurance (National, Workmen's Compensation and Guarantee) .. .. .	21	36
Uniforms and Dresses .. .. .	51	63
Provisions .. .. .	954	951
Drugs and Medical Requisites .. .. .	334	298
Fuel, Light and Water .. .. .	551	447
Laundry (Wages and Materials) .. .. .	284	299
Furniture .. .. .	76	87
Bedding and Linen .. .. .	96	73
Crockery and Hardware .. .. .	46	38
Cleaning Materials .. .. .	29	32
Lecture Fees, &c. .. .. .	173	149
Repairs, Painting, &c. .. .. .	93	149
Garden and Grounds .. .. .	175	201
Rates .. .. .	230	232
Insurance (Fire, &c.) .. .. .	20	21
Printing, Stationery, Telephone and Sundries ..	102	107
Flagging Footpath, Westcotes Drive .. ..	263	—
Loan Charges :—		
Interest .. .. .	204	177
Repayment of Debt .. .. .	651	702
Total Expenditure .. .. .	£5475	£5737
Less Training Fees, Rent of Garages and Miscellaneous Income .. .. .	460	334
Net Expenditure on Treatment of Patients .. ..	£5015	£5403
Net Expenditure per Patient Day .. .. .	18s. 0d.	18s. 10d.
INCOME.		
Income from Maternity Fees (including Medical Fees)	2094	2232
Net Cost (including Loan Charges) .. .. .	£2921	£3171
Number of Patient Days .. .. .	5566	5747

## DAY NURSERY.

Income and Expenditure for the two years ended  
31st March, 1939.

	Year 1937-38.	Year 1938-39.
EXPENDITURE.		
	£	£
Salaries .. .. .	619	648
Superannuation : Corporation's Contributions ..	30	30
Insurance .. .. .	24	43
Rent and Rates .. .. .	357	360
Furniture and Equipment .. .. .	58	83
Repairs, Painting, &c. .. .. .	34	10
Fuel, Light, Water and Cleaning .. .. .	252	220
Provisions .. .. .	528	524
Drugs and Medical Requisites .. .. .	13	9
Laundry .. .. .	167	177
Uniforms and Clothing .. .. .	95	79
Printing, Stationery, Postage and Telephone ..	13	10
Lecture Fees .. .. .	—	21
Sundries .. .. .	22	20
	£2212	£2234
INCOME.		
Maintenance Charges .. .. .	674	726
Contribution from Education Committee in respect of Mothercraft :—		
Tuition .. .. .	150	150
Meals for School Girls .. .. .	35	31
Meals for Mothers .. .. .	12	7
Sundries .. .. .	19	—
	£890	£914
Net Cost .. .. .	£1322	£1320



## INFANTS' MILK DEPOT.

Income and Expenditure for the two years ended  
31st March, 1939.

EXPENDITURE.	Year 1937-38.	Year 1938-39.
	£	£
Salaries and Wages .. .. .	458	466
Superannuation : Corporation's Contributions ..	19	20
Purchase of Milk, &c. .. .. .	1696	1531
Medical Requisites, &c. .. .. .	47	30
Rent, Rates and Insurance .. .. .	163	165
Fuel, Light, Water and Cleaning .. .. .	71	74
Telephone .. .. .	9	9
Printing, Stationery and Sundries .. . . .	20	14
Total Expenditure .. .. .	£2483	£2309
INCOME.		
Sale of Milk, &c. .. .. .	2082	1877
Maternity and Child Welfare Account :—		
Proportion of Salary of Manageress .. .. .	150	150
Proportion of Rent .. .. .	50	50
Total Income .. .. .	£2282	£2077
Net Deficiency .. .. .	£201	£232

# INDEX.

	PAGE
Abattoir .. ..	35
Air Raid Precautions .. ..	36
Ambulance Service .. ..	31
Analyst's Report .. ..	193
Ante-Natal Clinics .. ..	160
Artificial Sunlight Clinic .. ..	168
Atmospheric Pollution .. ..	212, 252

Bath Waters, Examination of .. ..	208
Births and Birth-rates ix., 3, 4, 5, 6, 10, 11	
Birth Control Clinic .. ..	165
Bronchitis .. ..	24

Cancer .. ..	24
Canal Boats .. ..	231
Causes of Death .. ..	9, 14
Cesspools, etc. .. ..	232
Cerebro-Spinal Fever .. ..	92
Children Act .. ..	151
City Mental Hospital .. ..	34
City General Hospital Report .. ..	109
"    "    Staff .. ..	115
"    "    Tables .. ..	120, 267
"    "    —Cases .. ..	
treated during year .. ..	121, 133
Climatological Station .. ..	145
Committees .. ..	iii
Consultant Service .. ..	115
Cowsheds .. ..	232
Cremation .. ..	35

Dairy Cows, Inspection of .. ..	242
Day Nursery .. ..	189, 271
Deaths, Classification of .. ..	14
Deaths and Death-rates ix, 4, 5, 6, 8, 9, 10, 11, 12, 14, 19	
Death Rates in other Great Towns .. ..	6
"    for Midland Boroughs .. ..	9
Dental Clinic .. ..	167
Diphtheria .. ..	20, 85
"    Immunisation .. ..	20
Disinfection .. ..	232
Disinfestation .. ..	233
Dispensary Report .. ..	57
Drainage and Sewerage .. ..	43, 234

Emergency Maternity Service .. ..	176
Erysipelas .. ..	92

Factories and Workshops .. ..	243
Fertilisers and Feeding Stuffs .. ..	210, 244
Financial Tables .. ..	265
Food Sampling .. ..	196, 245
Foods and Drugs Analysed .. ..	196
Food Supplies, Supervision of .. ..	237
Foodstuffs Condemned .. ..	237

	PAGE
Handywomen .. ..	173
Health Centre .. ..	31
"    Committee .. ..	iii
"    Department Staff .. ..	v
"    Visitors .. ..	v, 149, 191
Highcross Street Centre .. ..	159
"Home Place," Holt .. ..	98, 269
Housing .. ..	49, 236

Illegitimacy .. ..	8
Infant Life Protection .. ..	151
"    Milk Depot .. ..	158, 272
"    Mortality ix, 4, 5, 8, 10, 11, 187	
"    Welfare Centres .. ..	153
Inhabited Houses, number of .. ..	10
Influenza .. ..	24
Isolation Hospital Report .. ..	81
"    "    Tables .. ..	106, 268

Laboratory Report (Health Office) .. ..	193
"    "    (City General Hosp. & Isolation Hosp.) .. ..	99, 126
Legal Proceedings .. ..	252
Leicester Frith .. ..	34
Light Clinic .. ..	168
Local Government Act .. ..	151

Marriages .. ..	ix, 8
Maternal Mortality .. ..	6, 28, 185
"    "    Rates in other .. ..	
Great Towns .. ..	6
Maternity and Child Welfare Report .. ..	147
Maternity Bed Accommodation in the City .. ..	178
Maternity Home .. ..	180, 270
"    "    —Pupil Midwives .. ..	183
"    Homes (Registered) .. ..	183
Measles .. ..	19, 91
Meteorology .. ..	35
Midwives and Midwifery Service .. ..	169, 182
Milk Analysis and Sampling .. ..	197, 244
"    Depot .. ..	158, 272
"    Examination for T.B. .. ..	242, 249
"    Graded .. ..	243

Necessitous Maternity Cases .. ..	152
"    Tuberculosis Cases .. ..	79
New Houses Built .. ..	49
Nursing Homes (Registered) .. ..	183
Notifiable Diseases .. ..	108

Obstetric Consultants .. ..	175
Offensive Trades .. ..	251
Ophthalmia Neonatorum .. ..	152
Orthopaedic Clinic .. ..	168
Overcrowding .. ..	51

# INDEX—continued.

	PAGE		PAGE
Persons per house .. ..	10	Tuberculosis .. ..	27, 57
Phthisis ( <i>see</i> Tuberculosis)		„ After Care ..	79
Pneumonia .. ..	24	„ Attendances at	
Population .. .. ix, 3, 6	10	„ Dispensary ..	78
Poliomyelitis .. ..	92	„ Cases notified ..	27, 59
Post-Natal Clinics .. ..	163	„ Cases on Register ..	71
Pupil Midwives .. ..	182	„ Cases in the City ..	59
Public Cleansing .. ..	45	„ Cases sent to	
„ Hospitals .. ..	34	„ Sanatorium ..	77
Puerperal Pyrexia .. ..	90, 176	„ Cases sent to C.G.H. ..	78
		„ Contacts examined ..	76
		„ Deaths and Death	
Radiology .. ..	77, 99	„ Rates ..	11, 27, 62
Rag Flock Act .. ..	211, 244	„ Deaths in Children ..	67
Rateable Value of City .. ..	ix	„ Dispensary Report ..	57
Refuse Disposal .. ..	45	„ Domiciliary Treatment ..	78
Rehousing Schemes .. ..	50, 51	„ Examinations ..	76
Rivers and Watercourses .. ..	44	„ Milk for Patients ..	79
Royal Infirmary .. ..	32	„ New Cases ..	27, 59
		„ Patients on Dispen-	
St. Mary's Home .. ..	261	„ sary Treatment ..	78
Samples Analysed .. ..	195	„ Patients' Sleeping	
„ Defective .. ..	245	„ Shelters ..	79
„ taken of Foods and Drugs ..	244	„ Preventive Measures ..	80
„ of Foods and Drugs—		„ Recovered Cases ..	70
„ Action taken .. ..	245	„ Treatment in Sana-	
Sanatorium Report .. ..	109	„ torium ..	93
„ Extensions .. ..	82, 105	„ Treatment in C.G.H. ..	118
Sanitary Inspector's Report ..	227	„ Visits to Patients'	
„ Inspection—Summary of		„ Homes ..	79
„ Visits paid .. ..	230	Typhoid Fever .. ..	20, 92
Saturday Hospital Society ..	35		
Scarlet Fever .. ..	19, 83	Ultra-Violet Light .. ..	168
School Clinics .. ..	166		
Schools for Mothers .. ..	153	Vaccination .. ..	16, 17
School Medical Service .. ..	46	Venereal Disease, Report of V.D.	
Sewers .. ..	43	„ Officer .. ..	255
Sewage Disposal .. ..	43, 44	Verminous Persons and Premises ..	234
Shellfish .. ..	208	Violent Deaths .. ..	28
Shop Acts .. ..	251	Vital Statistics .. .. ix, xi, 3	
Slaughterhouses .. ..	252	„ of other Great Towns ..	6
Sleeping Shelters .. ..	79	Voluntary Hospitals .. ..	32
Slum Clearance .. ..	49		
Smoke Abatement .. ..	252	Ward Statistics .. ..	10, 11, 12
Staff, Health Department .. ..	v	Welfare Centres .. ..	153
Statistics, Summary of .. ..	ix	Whooping Cough .. ..	19, 91
Stillbirths .. ..	8	Water Supply .. ..	43, 210, 244
Statistics of other Great Towns ..	6		
Sub-Committees .. ..	iii	X-Ray Department .. ..	99
Sunlight Clinic .. ..	168		
		Zymotic Deaths, etc. ..	5, 6, 11, 13
Tipping of Refuse .. ..	45		